C CLASS

1951 **File No.** MIP 1151

B CLASS

P.W. DEPARTMENT

J BRANCH.

Subject:—

Ghataprabha

Valley Development

Project

C [K] 1953

I

I

File No. MIP 1151 J.Br.

Ltd. Scott. Slip. 24 A

593—1,00,000 7-60—K2
G. R., O. D., No 2408, dated 22-6-22.]

Std. Sectt. Form

DOCKET SHEET

Subject :—
Ghalāfpradha Valley
Dev. Project

File No. MIP 1151

P. W DEPT.

J BRANCH.

References :—

9194/36
8151/36

Date.	To whom sent	Notes and instructions.

Gen. 42 e.

No. 0/1835B-13

MEMORANDUM.

The undersigned presents compliments to the Asstt. Secy Pwd

Reference No., dated 10/4/April 1951.

Subject:— Endorsement below letter No. 8/S-2795 dated 7/4/51 from Shri P.N. Kaul Prime Minister's Secretariat New Delhi re: the representation received by the President from the Karnal Congressmen about the Khalispur Irrigation Project

Last Reminder No. 19

and is directed to invite attention to the communication marginally noted and to request the favour of an early reply.

This May 1951.

for Assistant Secretary to the Govt. of Punjab Irrigation & Power Deptt.

O. I. G. S.

J 8/5

I W. D.

File No. MIP 1151

Control No. 40333

8/11

8/5-8

pl. see O/pp

3 13 in DP 11157/40 335

J.Br

P.W.D

Please see office note
a linked P.W.S.D papers bearing
file No. O/23122 p. 14
d. The draft publ. forwarding
a copy of the office note
approved by D.S. & they may
issue
d.
18.5.57

21/5/57.

& pp. 4-25-9
pl. in PWD O/23122

(Below copy of PWD note dated the 18-4-57 recorded on the representation dated the 30-3-57 addressed to the President of the Indian Republic by certain MLAs of Karnataka re. financial aid for the Ghataprabha Valley Dev. Scheme in Bombay State.)

No. MDP. 1157-J

P.W.D.
Bg. (Bldgs No 1)
24 May 1957

Copy forwarded to the P & S.D. for information with reference to this memo no 0/18358-B, dtd 7-5-57.

By order etc
A. Ghosal
P.W.D.

18.5.57.

Issue
23/5
24/5

5

O/-

J. Branch. Public Works Department.

Pl. see O/pps.

In their representation dated the 30th March 1951, addressed to the President of the Indian Republic, the Karnatak members of the Legislature and others have represented the necessity of -

(a) granting financial aid for the Ghataprabha Valley Development Project. They have stated that this Government have started work on the first stage of the Project but find it difficult to set apart necessary funds,

(b) taking up and financing the Chhaya Scheme (irrigation project) in Hydrabad State,

(c) to make a substantial grant to the Bhoomaraddi Engineering College under the Karnatak University, which is greatly handicapped for want of funds.

2. With regard to (a), the Ghataprabha Valley Development Project, it may be stated that the first stage now sanctioned consists of the Ghataprabha Left Bank Canal taking off from the existing weir at Dhupdal and extending from mile 1 to mile 44. The area commanded by this canal is 250,000acres. The cost of the scheme will be about Rs 5-1/2 crores.

3. The progress of the work is satisfactory. The work was commenced in June 1949 and about 25 per cent. of the work has been done so far and the expenditure that has been incurred is about Rs. 100 lakhs. As adequate funds were not available during 50-51 and are not provided during the current year, the progress of the work has had to be heavily curtailed. The area that will be irrigated by the Canal is about 1,25,000 acres and the annual increase in food production will be about 25,000 tons. There is a provision during the current year of Rs.27.685 lakhs.

4. This Government is not concerned with the request at (b) above, while the request at (c) is for the Education Department to consider. The extract will be forwarded to that Department for necessary action, under intimation to the Political and Services Department.

Through D.E.(I).

Id.F.J.A.L.
18/4/51

Id.P.K.K.M
18/4/51

Id.K.V.J(oglekar),
18/4/51 D.S.

Id. G.V.B(edekar)
18/4/51
Secy., P.W.D.

No.MIP 1151 J. Public Works Department,
Bombay Castle (Bombay No.1),
24th May 1951.

Copy forwarded to the Political and Services Department, for information with reference to its Memorandum No.O/18358-B, dated the 7th May 1951.

By order of the Governor of Bombay,

Assistant Secretary to the Government of Bombay,
Public Works Department.

Received 26/5/1951

2 BAK 24/5/51.

D.O.No. B.M.I.4,

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
C.V.Dharwar, 29th May 1951.

Subject: Opening of the Ghataprabha
Left Bank Canal.

Dear Shri Champhekar

The Hon'ble Minister for Public Works & Housing mentioned to me that he proposes to request Hon'ble Shri.M.D.D.Gilder to open the new Ghataprabha Left Bank Canal on the 21st June 1951 when himself and Hon'ble Shri.M.P. Patil, Minister for Agriculture & Forests will also be present. Please inform me if you can make it convenient to be present also.

Yours sincerely,

29/5

To

Shri. M.L.Champhekar,
B.E., I.S.E.,
Chief Engineer to the Govt.of Bombay,
Public Works Department,
BOMBAY-1.

3 Sq.

Dear

1 Your Do. letter
B.T. U.A. dt. 29.5.81

2 I shall be free
on ~~dt.~~ 21.6.81 at
the opening of the
Y.M.C.A. Sports
function is fixed
up on that day

Yrs.

30.5.81

To
Shri A.G. Naik
S.E. R.D.C
Dharwar

Issue
31/5

J 31/5

B.M.D.
File No. MLP 1151
Serial No. 47517

J 31.5.81

D.O. No. MIP.1151/47517-J

Public Works Department
Secretariat.
Bombay, 31st May 1951.

Dear Naik,

Your D.O.letter No.B.M.1.4 dated 29th May 1951.

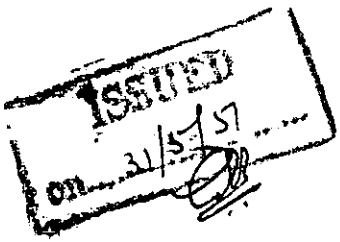
2. I shall be present on 21st June 1951 at the opening of the Ghataprabha Left Bank Canal if that function is fixed up on that day.

Yours sincerely,

31.5.51

(M.L.Champhekar),

Shri A.G.Naik,B.E.,B.S.E.(I),
Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar.



Recvd
31/5

2/11

D.O.No. B.M.I.4

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Camp via Dharwar, 29th May 1951.

Subject:- Opening of the
Ghataprabha Left Bank Canal.

Dear Shri Champhekar,

The Hon'ble Minister for Public Works and Housing mentioned to me that he proposes to request Hon'ble Shri. I.D.D.Gilder to open the new Ghataprabha Left Bank Canal on the 21st June 1951 when himself and Hon'ble Shri.M.P.Patil, Minister for Agriculture & Forests will also be present. Please inform me if you can make it convenient to be present also.

Yours sincerely,

29/5

To

Shri. M.L.Champhekar, B.E., I.S.E.,
Chief Engineer to Government,
Public Works Department, BOMBAY.

Copy submitted to the Hon'ble Minister for Public Works & Housing, Bombay

30.5.51

J.B

P.W.D.

This is a copy meant for the H.M., to whom it may be submitted for information. The original letter addressed to the C.E. is being replied to by him that he would be present at the opening ceremony, if it is finally fixed on the 21-6-51, as proposed overpage

VM
31-5-51

H/31/5/51

D.S.
Secy
H.M.

Hon. Health Minister in connection with Council
Hon. Agriculture Minister attended

Jun 3 6-51

Recd
4/6

P.W.D.
File No. MIP 1151 2
Serial No. 47313

J P

Duplicate

G.R. No. A—2646, dated 15-12-10.]

P. W. D. 229 a.

No. of 19

DIVISION

GHATAPRABHA LEFT BANK CHANAL

PUBLIC WORKS DEPARTMENT:

Dated 19

FUND HEAD—

MAJOR HEAD— Provincial

MINOR HEAD— 68 I.N.E.D.Works

SERVICE HEAD— Constructing Ghataprabha Left Bank Canal 0 to 44 miles

DEPARTMENTAL HEAD— Contingencies

ESTIMATE framed by Executive Engineer, in the office of the Executive Engineer, Ghataprabha Left Bank Canal Division of the probable expense that will be incurred in making arrangements for canal opening ceremony on 21.6.1951 by Honourable Dr.Gilder, Minister for Public Health, Bombay State.

Rs. 400/-

(Call or Authority.)

GENERAL DESCRIPTION

This estimate provides for making arrangements for opening ceremony of the Ghataprabha Left Bank Canal by the Honourable Dr.Gilder, Minister for Public Health. Provision for the construction of a pandal 80' x 60' is made. Provision for other items such as pansupari, photo, garlanding etc has also been made.

E/14

ABSTRACT

Quantity.		Items.	Rate. Rs.	a.	p.	Per.	Amount. Rs.	dec.
Job		1. Providing a pandal of 80'x60' with bullies, bamboos, bamboo mattings etc inclusive of all decorative works etc. complete	Lump				200	
500	No.	2. Charges for invitation cards etc	10			per 100	40	
	Job	3. Photo arrangement					50	
	Job	4. Pansupari and garlanding arrangements					50	
		5. Unforseen items	Lump				60	
		Total Rs....					400/-	
		(Rupees four hundred only)						

Superintending Engineer, K.I.C.

Engineer:

Dated 19 Executive Engineer.

VERY EARLY PLEASE.

No. G-23.

Office of the Superintending Engineer
Karnatak Irrigation Circle,
Dharwar, 15-6- 1951.

To

The Chief Engineer to Government,
Public Works Department,
Bombay.

Subject:- Muhurt ceremonies-
opening of the Ghataprabha L.B.Canal.

Reference: Government Finance Department Circular Memorandum No.8059/33 of 2-4-1951.

2. An estimate amounting to Rs. 400/- for " Making arrangements for opening ceremony of the Ghataprabha Left Bank Canal by the Honourable Minister for Public Health on 21-6-1951, is submitted herewith in duplicate for favour of early sanction and return in accordance with G.C.M.P.W.D. Nos.5250/36 dated 26-10-1950 as amended by the Government Circular above referred to.

3. The cost will be met with from this year's allotment for the Canal.

Superintending Engineer,K.I.C.

P. W. D.
File No. PTP1151
Serial No. 52944

~~9~~ 17 MIP 1157
SL 9 66

P.W.D.
J.

The S.E., K.I.B. has forwarded an estimate, the latter amounting to Rs. 400/- for making arrangements for opening ceremony of the Bhatapratha Left Bank Canal (presumably first eight miles) by H.M. Health on the 21-6-57 in ~~A~~CM No. 5250/36 dated the 26.10.57, a maximum of Rs 100/- was prescribed for expenditure in connection with Market ceremonies. This amount has now been raised to Rs. 500/- the Concurrence of Secy. F.D. is necy. for any excess over this amount. The estimate which is for Rs. 400/- appears to be in order & may be sanctd without reference to F.D.

Slip A (kept below)

∝ in G.CM F.D NO 8(SS)/33 of 2-4-57 → would have by 30/11/57

The draft ~~is~~ put up for appl. may issue.

Sd/- M. Sarwar 21/11/57

Sd/- 27/6/57

Sd/- 30.6.57

Sec. B.B. & Del (I)
PTO

K 2/6/18

No necessity to sanction the estimate.
The SE may be permitted to spend
not more than Rs 400/- for the opening
Camp of the Cart Canal; to be charged
to contingencies. The sanction Project Estimate

Rly
20/6

25

Ky 20/6/18

Immediate Letter

No: MIP 1157 J.

P.W.D.
BC (Bldg No 1)
20th June 1957

To
The S.E. K.J.6

Subject Opening of the Ghataprabha Left Bank Canal
Estimate for —

Reference: Your letter No. G-23, h.ST
dated the 15-6-57

2. ~~The estimate amounting~~ you are permitted to incur an expenditure up to ~~Rs~~ Rs 4000/- ~~for~~ for making arrangements for the opening ceremony of the Ghataprabha L. B. Canal" by the Hon'ble Health Minister on the 21-6-57, ~~in accordance with the sanctions already accorded~~ charges to be debited to the sanctioned Project Estimate ~~and returned herewith~~

3. The ~~cost of which~~ expenditure should be met from the allotment ~~plans~~ for the project placed at your disposal during the current year. The estimate is returned herewith

Encl 1-2 Estimate

By order etc.
A.E. to Govt.

Copy

Copies forwarded to
the 7 S
the Ch. Bhar
the Ex Engr., Bhatapara — L.B.G. Dn

for information

20.6.51.

Issue at once today
26/6 ~~Recd~~

23/21

Letter.

Immediate.
No.MIP 1151 J.

Public Works Department,
Bombay Castle (Bombay No. 1),
20th June 1951.

To
The Superintending Engineer, Karnatak Irrigation Circle.

Subject:-Opening of the Ghataprabha
Left Bank Canal.
Estimate for

Reference:Your letter No.G-23, dated the 15th June 1951.

2. You are permitted to incur an expenditure up to Rs.400/- on "making arrangements for the opening ceremony of the Ghataprabha Left Bank Canal" by the Honourable Minister, Health on the 21st June 1951, chargeable to "Contingencies" of the sanctioned Project Estimate.

3. The expenditure should be met from the allotment for the project placed at your disposal during the current year.

The Estimate is returned herewith.

By order of the Governor of Bombay,

O/C
5 pps

Assistant Secretary to the Government of
Bombay, Public Works Department.

ISSUED on 20/6/51

D.A:-Estimate.

Copy forwarded to -

the Finance Department,
the Accountant General, Bombay,
the Executive Engineer, Ghataprabha Left Bank Canal Division,

for information.

6
VA/20/6/51.
20/6

20/6

T 27 T 25

Ghataprabhà Left Bank Canal Project.

==========

Introduction
Water
Rainfall
vagaries
Karnatak & other parts
scarcity
distress
Irrigation
Only solution
Major
Irrigation
Improve conditions

Agriculture which entirely depends on the vagaries of rainfall can never be successful. Sufficient and seasonal rainfall is vital for agricultural operations but unfortunately it is often found failing in this respect. Either there is shortage or excess of rainfall or it is untimely. This is the prime cause of ~~all~~ the difficulties and the unhappiness of the agricultural community. Large areas of the Karnatak in common with certain other parts of the Bombay State are particularly liable to scarcity of rainfall from year to year. Every one is aware of the consequent distress of the people depending on agriculture in these areas. The only solution of this problem is the harnessing of all possible sources of water and utilizing them for agriculture, and ~~this is~~ Irrigation ~~which~~ is recognized by every one as the foremost ~~necessity of the~~ need of our country. It is the only remedy to improve the economic condition of the agricultural masses and to overcome the shortage of food grains which have to be imported at present in lakhs of tons from abroad. Accordingly, the Government of India and the different State Governments are vigorously pursuing the execution of big Irrigation projects throughout the country to the extent the resources permit. It is the limitations of the resources in the matter of finance, technical personnel, and plant and machinery that restrict ~~the different~~ machinery of Governments in carrying out the full programme of Irrigation projects as ~~contemplated~~ desired by the people

2. Among the Development Schemes in the Post War Reconstruction Programme of Bombay Government, Major Irrigation

Irrigation Projects have been given top priority with a view to effecting improvement presently in the economic condition of the agricultural population and overcoming the deficit in food grains in this State. A large programme covering a period of 15 years was accordingly framed and a number of projects were taken up for investigation and preparation. ~~This investigation and preparation work is going ahead as far as possible and when the projects are finalised, they will be taken up for execution so far as the resources permit.~~ No part of the State will be overlooked in this respect and the Karnatak will certainly have its share in the provision of irrigation. Several projects are already under execution and will be carried out to completion, bestowing the benefits of irrigation on large areas in the different parts of the State. ~~The~~ among the more important of ~~these~~ the works ~~actually under execution and progressing~~ satisfactorily may be mentioned here.

~~The~~ Kakrapar (Tapi Valley) Project estimated to cost Rs. 1216 lakhs and expected to be completed in 1957 will irrigate 5,90,000 acres in Surat District, and ~~The~~ Gangapur Storage Project estimated to cost Rs. 334 lakhs and expected to be completed in 1956 will irrigate 37,500 acres in Nasik and Ahmednagar Districts. The Ghataprabha Left Bank Canal Scheme is one of the ~~important projects in connection with which we have assembled here today and about which I will speak in greater detail at a later stage.~~ It is estimated to cost Rs. 545 lakhs and ~~is expected~~ to be completed in 1957, when it will irrigate 1,25,000 acres in Belgaum and Bijapur Districts.

MIP·1151

42807

J.B.

P.W.2

Submitted for information
Record.

K.J.H.
12/6/51

14/6/51

A.A.S.

K.H.S. 16/5/51

D.S

J 16/5
18

Recorded
7/6

Fin. no. MIP 1151
42-807

J

No.G.R.-74

Karnatak Irrigation Circle,
Hubli, 12th May 1951.

To

The Inspector General of Prisons,
Bombay State, Poona.

Subject: Extra mural camps for employment of prisoners.

Reference: P.R.H.D.No.6696/5 dated 17-2-1949.

An experimental camp of 100 prisoners can be opened on the work of the construction of the Ghataprabha Left Bank Canal in Belgaum District. But this will not be possible during the current year, as the allotment is not even sufficient to keep the work, already started, going.

Superintending Engineer, K.I.C.

Copy forwarded with compliments to the Chief Engineer to Government, Public Works Department, Bombay.

Copy forwarded with compliments to the Secretary to Government, Home Department, Bombay.

Copy forwarded with compliments to the Executive Engineer, Ghataprabha L.B.C.Dn., Ghataprabha.

3 : 27

The total financial commitments of Bombay State on account of these and other projects actually under execution amount to Rs. 26.5 crores. They will irrigate when fully developed a total area of 8,90,000 acres, producing 1,78,000 tons of food grains. The extent of this programme clearly shows the keeness of Government in providing irrigation facilities to the largest possible area in the State.

There is another Irrigation Project actually under execution for the benefit of the Karnatak, although it is a much smaller work. I refer to the Kolshi Weir Scheme in the former Ramdurg State now merged in Bijapur District, which is expected to be completed in 1953 at an estimated cost of Rs. 20.41 lakhs to irrigate 3,650 acres in Bijapur and Dharwar Districts. It is proposed to investigate and carry out later the expansion of this project by increasing the storage and extending the canal in order to bring a much larger area under irrigation. This proposed extension of the project is under active consideration and will no doubt be taken up for execution in due course.

All these works will be carried out to completion and there is no question of stopping them ~~due to financial stringency.~~ The fears entertained in certain quarters in this connection are quite baseless. ~~It may~~ Should it not be possible to provide adequate funds and speed up the works as desired, ~~but this is only a temporary phase, making it necessary to slow down for the time being the works to a certain extent, but there is certainly no question of giving up the projects.~~ I am sure the local people especially the farmers will be benefited by the projects will come forward to assist Govt. by advancing local loans for the projects as much as they are interested

M.B.

8 4 4 29

3. Let me now say something in detail about the Ghataprabha Project, in connection with which we have assembled here today. The Gokak Canal is the only existing Major Irrigation Work in the Karnatak. ~~It is unfortunate that no other Major Irrigation Works could be carried out in the past for the benefit of the~~ Karnatak. The Gokak Canal system consists of a reservoir formed by a masonry weir built across the Ghataprabha river at Dhupdal (constructed) in 1891 and 14½ miles of main and branch canals and 36 miles of distributaries, which irrigate about 15,000 acres in Kharif and Rabi seasons. The immense success of irrigation on this canal created a keen ~~demand~~ demand from the agriculturists of the Karnatak for the extension of irrigation facilities to their areas. The Ghataprabha Valley Development Project which had been ~~previously~~ contemplated since long, was accordingly included in the Post War Reconstruction Programme and taken up for investigation. It comprises ~~of~~ three stages as follows:-

(a) The Ghataprabha Left Bank Canal which will be a monsoon canal of 1,500 cusecs capacity, taking off from the existing Dhupdal Weir to command 4½ lakhs of acres.

(b) A storage of about 30,000 Mcft. to make the Ghataprabha Left Bank Canal an 8-months or perennial canal.

(c) A second storage of about 30,000 Mcft. and the Ghataprabha Right Bank Canal to command about 8½ lakhs of acres.

The total cost of the whole scheme will be about Rs.30 crores. It ~~will not serve any purpose to~~ you will not expect me to say visualise at this stage as to when the whole scheme, which will be taken up ~~only~~ by stages, will be carried

... out ...

out to completion, bestowing immense benefits on the Karnatak. For the present, we are concerned with stage I of the project, which, as sanctioned for costing Rs.545 lakhs consists of the Ghataprabha Left Bank Canal, taking off from the existing Dhupdal Weir and extending to 44 miles in length, with two branches aggregating to a length of 31 miles. When this part of the project is completed by about 55-56, it will irrigate 1,25,000 acres producing 36,000 tons of food grains costing about with about Rs.90 lakhs a crore. It will entirely change the face of the dry and scarcity-stricken areas in the Belgaum and Bijapur Districts through which the canal will flow. With a view to extending irrigation facilities as early as possible without waiting for the completion of the whole 44 mile length of the canal, it has been settled decided to complete the canal works by stages and start irrigation as the construction work of each stage is finished. Accordingly, we are today I have pleasure in inaugurating today irrigation of about 1,500 acres in the first 8 miles of the canal.

Normally irrigation under a scheme begins when the scheme is nearly completed. Here, however we have an existing weir to supply water and with a view to ...

4. I am glad to mention certain points Certain very agreeable features have come to notice in connection with the execution of the work on the Ghataprabha Canal. First, The cultivators in the areas where the work is being carried out are extremely keen about the progress of the project and have shown perfect co-operation in every respect. For example, not a single acre of land had to be acquired so far, and all the lands required for the work having been taken over by with more written consents, many which have been readily forthcoming. Secondly,

The contractors having quoted very high rates, the work has been mostly done on piece work system, which has proved to be both speedy and economical. It has been done on task work basis by giving it to

leaders ...

leaders of labour gangs, thereby eliminating the middle-man's profit, and benefiting directly the local labour ~~class~~. There has been no shortage of local labour which has found ready employment on the work. The major portion of the expenditure incurred on the project has been disbursed as wages to the local villagers, the amount so far distributed being over Rs.60 lakhs.

Lastly, there has been no trouble of any serious nature in connection with the execution of the project, which has been going on smoothly and progressing satisfactorily. All this has been achieved due to the untiring energy, zeal and devotion to duty shown by the band of Engineers, headed by Shri A.G.Naik, Superintending Engineer, Karnatak Irrigation Circle, and I congratulate all of them, and commend their efforts.

5. Due to financial stringency, I regret to say that it has not been possible to provide adequate funds for the project this year, as a result of which, the progress on the work has had to be slowed down to a certain extent ~~for the present~~. This need not however create any misgivings that the project will be given up. You may rest assured that it will be carried out to completion, although it may take a longer time to do so. It is here that the people of the areas which will be benefited by the project can come forward to help Government and themselves by subscribing generously, ~~when it is finally decided by Government to raise a local loan~~ to the loan for the speedy execution of the project. I am sure that the people of the Karnatak who have been so keen about the project will not fail in their duty in making the loan a complete success.

I ~~had been~~ was associated with this project as Minister in charge of the Public Works Department in its ...

8 LH 32

its initial stages and am particularly ~~naturally~~ glad to have this opportunity of renewing ~~that~~ my associations when a part of the work is completed and irrigation is actually started. I have therefore great pleasure in opening the new canal for irrigation ~~and wishing~~ all success and prosperity to the irrigators, and speedy completion of the project

BVK.
16.6.51.

16-6-51

3

Immediate.

Office of Hon'ble Minister
for Public Works & Housing,
Secretariat, Bombay 1,
14th June 1951.

Hon'ble Dr.M.D.D.Gilder, Minister for Health, Bombay, has agreed to perform the opening ceremony of the Ghataprabha Left Bank Canal on the 21st June 1951. H.M., A.H. & H.M., P.W.D.& Housing, will also accompany H.M., Health. The H.M. desires that the P.W.D. should prepare a note in the form of a speech to be ~~x~~ delivered by the Hon'ble Dr.Gilder at the time of the opening ceremony. This material should be submitted immediately.

P.A. 14-6-51.

P.W.D.

14/6
2.25

14/6

D.S

Immediate. P.W.D.

J. 16

Submitted with a draft speech for approval pp. 1-8

16-6-51

D.S.

Secy

X 18/6

H.M., P.W.D

J.S. 18/6

H.M., Health

× seen by H.M., Health.

25-6-51.

16/6/51

18/6/57

June 18/6/57

Record
21/6

21/6
3.45

H 35

Immediate

H.M's (PWD.& Housing) Office
Secretariat, Bombay 1,
14th June 1951.

H.M. desires to know the expenditure so far incurred and the financial requirements year by year, on the Ghataprabha Left Bank Canal Work, Jog-Karnatak Electric Grid Scheme and Neersagar Waterworks. This information is required by the H.M. before he goes on tour in the Dharwar, Belgaum Districts on the 19th instant.

P.A. 14.6.51.

D.S. (Shri Joglekar):

Subsequently P.A. to H.M. informed me that H.M. also desires to know the latest progress made on each of these three Projects.

14/6/51

P.W.D.

The notes which were prepared in the last week of March 1951, giving description and the progress on these three projects to middle of March, for being supplied to the M.L.As. of the Karnatak Region are placed below for reference.

Ghatprabha Left Bank Canal.

The upto date progress as known in this office is as under.

... About 25 per cent work has been done so far. The work in the first 8 miles length has been completed and this length will be opened for irrigation during the ...

the current monsoon, on the 21st June 1951. The area which can be irrigated in this length of the canal is about 1500 acres. The large cross drainage work just beyond mile No.8, i.e. aqueduct across Jagnur Nalla, has been started and if sufficient funds can be made available, the aim is to complete the canal up to mile No.20, by June 1952, so as to irrigate an area of 30,000 acres from the rainy season of 1952.

The following table shows the estimated cost of the project, expenditure already incurred and the future financial requirement year by year.

(Figures are in lacs of rupees)

Estimated cost.	Expenditure to end of March 1951.	Financial requirement for maintaining good progress				
		1951-52	1952-53	1953-54	1954-55	1955-56
545	100	78*	90	90	90	97

*Note:- Budget provision for 1951-52 is only Rs.28 lakhs, but the S.E., K.I.C. has pressed the necessity of an additional amount of Rs.50 lakhs in this financial year to maintain the progress, so as to complete the works in time.

Neersagar Water Supply Scheme.

Progress so far made on this project is described below.

Tenders for the earthen dam and its allied works received by Govt. had to be rejected owing to their high cost. Govt. has now decided to carry out the work departmentally.

Orders ...

Orders for earth moving machinery valued at about Rs.4.46 lakhs have been placed with M/s. Kamani Engineering Corporation Ltd., Bombay. The position of the several items of works in connection with the scheme is as follows:-

(1) Detailed plans and estimates for waste weir and side channel are under preparation with the Ex. Engr., Karnatak Public Health Works Dn., Dharwar.

(2) Proposals for acquisition of lands for the basin have been submitted to the Revenue authorities.

(3) The work of non-residential huttings has been entrusted to a contractor by negotiations as no contractors came forward, when public tenders were invited.

(4) The work of 27" raw water rising main road is nearing completion.

(5) Columns and walls of the other compartment of Saraswat colony reservoir are nearing completion.

(6) The work of 18" dia. rising main is in progress, the length of line laid during the month of April being 6,300'.

What about the Service Reservoir?

(7) The work of erection of steel oil storage tank at station yard is in full progress.

(8) Approximately 3580 Rft of 27" pipes have been conveyed to site of work.

(9) The estimate for service road is under preparation.

(10) One compartment of Saraswat Colony (Dharwar) reservoir is completed, while the columns and walls of the other compartment are nearing completion.

The following table gives information about the estimated cost etc.

pto ...

(Figures are in lakhs of rupees)

Estimated cost.	Expenditure to end of March 1951.	Financial requirement to maintain good progress				
		1951-52	1952-53	1953-54	1954-55	1955-56
151	40	52*	30	29	-	-

*Note:- Budget provision during the year 1951-52 is Rs.26 lakhs only. But the figure of Rs.52 lakhs is indicated here on the basis of the demand made by the P.H.E., in his budget proposals.

Jog-Karnatak Electric Grid Scheme.

Progress on the survey work and the Project so far made is described below.

(1) Progress of Survey Work:

The survey work on the 110 kV and 33 kV line routes and substation sites is in full swing and is being carried out by contract. The work completed so far is as follows:-

No.	Line.	Percentage work Reconnaissance Survey.	Completed Detailed survey.
1.	110 kV Transmission Line.	85 %	40 %
2.	33 kV Transmission Lines.	100 %	60 %

Survey of some of the substation sites have been completed. Every endeavour is being made to complete the detailed survey work as early as possible. The survey work will have to be suspended during the monsoon in some parts and the completion is expected by February 1952.

(11) ...

(ii) Progress so far made on the Project:-

Most of the design, preparation of specifications and inviting tenders of the substation equipment and transmission line materials required for the scheme is completed. All the substation sites have been selected. Surveys are in progress. The distribution system for power supply to rural loads round about Hangal and Ranibennur - Byadgi areas are being worked out. Work connected with civil engineering has commenced with the joining of the Executive Engineer (Civil) at Hubli in ~~Marx~~ May 1951.

How many sub-station buildings have been built & where? When their construction is expected to start & to complete? What about Colony building & staff quarters at sub-stations? What about F[illegible] for towers for the transmission line?

(iii) Progress regarding placing of orders.

Orders for complete substation equipment required for the scheme have been placed on 9th January 1951. Orders for the Power conductors, insulators and ground cable for the 110 kV transmission lines have been placed through the Director General of Supplies and Disposals, New Delhi. Orders for towers for 110 kV transmission lines are expected to be placed through the Director General of Supplies and Disposals shortly. Orders for 33 kV and 11 kV lines insulators have been placed through the Director General of Supplies and Disposals. Orders for power conductors and poles for 33 kV and 11 kV lines have been placed directly by this Department. Orders for other materials and equipment will be placed as and when necessary.

What is the value of the orders placed? This may be given chronologically (the dates of placing orders) 16/6/51

Estimated cost of the scheme and phased programme of expenditure are shown in the following table:-

(Figures are in lakhs of rupees)

Estimated cost.	Expenditure to end of March 1951.	Requirement of finance if proper progress has to be maintained.			
		1951-52	1952-53	1953-54	1954-55	1955-56
213	0.3	45*	100	67.7		

BVK.
16.6.51.

*Note:- Budget provision for 1951-52 is also Rs.45 lakhs.

Information regarding H.M.P.W.D's querries regarding the Jog Karnatak Electric Grid Scheme are given below.

1. Substation Buildings, their location and construction.

The following table gives the number of technical buildings to be constructed at each substation and the approximate dates of commencement and completion of these

No.	Location of Sub-station.	No. of Technical Buildings.	Probable dates of commencement and completion of donstruction.
1.	Sirsi.	3	January 1952 to March 1953.
2.	Kavalvad.	2	
3.	Dandeli.	3	
4.	Hubli.	8	
5.	Gadag.	2	
6.	Dharwar.	1	
7.	Hanagal.	1	
8.	Harihar.	2	
9.	Renibennur.	3	
10.	Byadgi.	1	
11.	Haveri.	1	

2. Colony Buildings.

At every sub-station of the Scheme residential quarters are proposed for the technical staff and construction of these will be started in the beginning of 1952 and completed by March 1953.

Estimated cost of the residential buildings at Hubli which will be the largest sub-station is Rs.4.1 Lakhs whereas in a small sub-station like Haveri, cost is estimated at Rs. 0.7 Lakhs.

3 Foundations for Towers.

If Government decides on placing orders for imported towers from France, within about a month's time, delivery of period of whose will suit the programme of direction of the sub-stations, work on the foundations

of towers may be expected to commence in January 1952 after stubs are received and the erection of the 110 kV line completed by April 1953.

4 Orders placed, their value and Delivery.

The orders placed so far for the important materials and equipment required for the scheme are given in the table below with the value and delivery periods marked against each:

No.	Materials or equipment	Date of placing order	Approximate value in Rs. lakhs	Expected date of Delivery.
1.	Sub-station equipment.	9.1.1951.	50.76	Jan. to June 1952.
2.	Rail poles for 33 kV lines.	3.3.1951.	2.15	May 1952.
3.	Power conductors for 110 kV lines.	31.3.1951	10.14	Nov.1951 to Nov.52.
4.	Ground cable for 110 kV lines.	31.3.1951.	2.28	Dec.1951.
5.	Insulator for 110,33 & 11 kV lines.	7.4.1951.	4.63	Feb.1952.
6.	Powers conductors for 33 and 11 kV lines.	14.5.1951.	5.93	June 1952 to Feb.53.
7.	Towers for 110 kV lines.	Will be ordered shortly after Govt's approval.	22.27	Feb.1952 if imported towers are ordered.
8.	Wood poles for 11 kv lines.	Orders will be placed shortly.	0.83	March 1952

98.99 Say Rs 99 lakhs

Note: Regarding items 3 & 4 the acceptance of the orders has not been received so far.

Value of equipments still to be ordered in addition to item 7 and 8 above is Rs.30 Lakhs.

VRV
18-6-51

SKI 18.6.51.

1-5 T 45

D.O.No. T8/1/1220
Electric Grid Offices,
Mercantile Bank Building, Fort,
Bombay 1: 18th June, 1951.

Dear Shri Joglekar,

I am sending herewith a Note giving information regarding H.M.'s queries on the progress of Jog-Karnatak Electric Grid Scheme.

Yours sincerely,

I.R.Nandya
18-6-51

Shri K. V. Joglekar,
Deputy Secretary to Govt.,
P.W.D., Bombay.

Encl: Note.

Submitted with reference to H.M.P.W.D's marginal queries on Pt 3 and 5 ante.

(i) Progress on the reservoir at Saraswati Colony = Dharwar is shown as item (10) on page 3 ante

P.T.O.

MIP 1151 K/46

(ii) Additional information about the Jog-Karnataka Electric Grid Scheme will be found at pages 7 and 9.

KJ 18/6/57

Sdy

H.M

J.S. 19/6

J. Br 26/6/57

Recd 26/6

2/7 SBr

P. W. D.
File No. MIP 1151
Serial No. 57250

D.O. G-112

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Via Dharwar, 16th June 1951.

Dear Shri Acharya,

The following agenda is proposed for the opening ceremony of Ghataprabha Left Bank Canal to be inaugurated on the 21st inst.

(1) Welcome Song.

(2) Welcome Speech ~~and proposing Dr.Jeevraj Mehta Hon'ble Minister, Public Works and Housing to the Chair~~ by the Chief Engineer, Public Works Department.

(3) Report of the Works by the Superintending Engineer, Karnatak Irrigation Circle.

(4) Speeches by the Public Leaders.

(5) Requesting Dr.M.D.D.Gilder, Hon'ble Minister, Public Health, to open the Canal.

(6) Opening the Canal and address by the Hon'ble Minister, Public Health.

(7) Speech by the Hon'ble Minister, Agriculture and Forests.

~~(8) Presidential speech by the Hon'ble Minister, Public Works and Housing.~~

(9) Thanksgiving by the Executive Engineer, Ghataprabha Left Bank Canal Division.

(10) Pansupari distribution.

Would you please put up this to the Hon'ble Minister, Public Works and Housing and communicate his approval thereto early to me as also to the Executive Engineer, Ghataprabha Left Bank Canal Division, Ghataprabha.

Honourable Minister had mentioned during his last visit to Ghataprabha that he would request Hon'ble Shri. M.P.Patil to come over here for the ceremony as he has been taking keen interest in the progress of the work. I hope he is coming.

Yours sincerely,

To

Shri.B.M.Acharya,
Personal Assistant
to the Hon'ble Minister,
Public Works and Housing, Bombay.

Shri Naik was informed on phone as personally instructed by the H.M.

From Gokhalenu,
N S Joshi,
B. E. (Civil), M. I. E (Ind.),
M. R. San I. (London).
Retired Superintending Engineer. (Bombay P. W. D.)

1447

1287 Shivajee-Nagar,
Poona 5.

Date 29th April 1951

Dear Sir,

On receipt of your letter dated the 16th August '50, I started further scrutiny to determine the correctness or otherwise of my design viz. 1/4" thickness of plate for 10' diameter. This was done in view of the opinion expressed by Shri. -- Champhekar that 7/16" thickness of plate was essential for a pipe with 10' diameter and of the fact that in your letter you conveyed that this view was also corroborated by the C.W.I.N.C.

ACKNOWLEDGED
No. Pwd/7
Date 2/5/51

Instead of restricting my search to theoretical discussions I thought the best method would be to collect data for existing pipe lines on Hydro-Electric and other plants in countries like U.S.A. and Sweden where scores of such pipes were already installed and had stood the test of 30 to 40 years. "The test of a pudding lies in its eating." Similarly, " The test of the correctness of a design, (like the one in question) lies in a number of pipes so designed working satisfactorily over long periods."

11/5/51

I enclose for your perusal a statement giving information and dimensions of 11 pipe lines and request you to peruse the same, particularly columns 3 and 4, which give the diameter and the thickness of plate. You will find in the list, pipes of 10' and even 11' diameters having 1/4" plates (and with pressure head of water comparable with those in the pipe designed by me for Ghataprabha In fact you will be astonished to find that one pipe with 13' diameter has only 7/32" plates (i.e. thinner than 1/4"), as the water-head is low, [redacted]

Jun 1/5/51

The information incorporated in the accompanying statement has been obtained by correspondence with Corpora-tions owning these pipes and from eminent consulting * Engineers who designed those pipes. I will consider it a pleasure to show to you the original letters, books and photographs.

---

* I did not stop at only collecting information about such pipes. I also discussed the principles and formulae with editors of Authoritative books.

In your letter of the 16th August 1950, you had made a reference to the pipes for Vaitarna and had stated that they were adopting 5/8" plates for 10' pipes. It would interest you to know that the designers of Va-itarna are now converted to economic designs and practice indiceated by pipes in the accompanying list. They have now decided to use a 3/8" plate for 10' diameter (and a water pressure head of 180') when their original design contemplated double that thickness. Mr. Modak's recent visit to Sweden and discussions with Swedish(and United States) Engineers, is probably responsible for this change. Vaitarna is a typical example to illustra te that as much as 50% steel (and hence cost) could be saved by proper ~~designs~~- economic designs.

Permit me to add, that P.W.D. Eng-ineers have multi-farious problems to deal with and so much of routine paper work that it is no wonder if they find no time to study such problexms, in upto date economic designs ~~(without involving risk)~~. I think the proper way is to encourage study at the hands of those who have the leisure and the aptitude to do so, if our designs are to be economic.

I can imagine the difficulties to be faced under the present circumstances by the administrators; A mass of suggestions and criticisms are levelled at them by all and sundry; it is also imaginable that some (or perhaps a large percent) of these is undeserved. It is probable therefore that great difficulty is experienced in sorting out the constructive from the destructive type, as b-oth time and staff available to scrutinize and determine this is limited

Even so, I hope you will find convincing data in the accompanying list to permit you to satisfy yourself, that 1/4" thickness of plate for 10' diameter (and 5/16" for 13' to 14' diameter) is quite a safe design for water-heads of the order of 100'

I would request you not to limit the question of large scale economy in designs to steel pipes or to Ghataprabha only. Conscientious study on proper lines leaves good scope for large-scale economy in the other problems and projects as well.

Yours sincerely

Accompt List

To Hon Dr. Jeevraj Mehta minister P.W.D Bombay.

Statement showing dimensions of steel pipes of large size.

Hydro-Electric Works.

S. No. (Symbol).	Name of Country.	Name of pipe line.	Diameter.	Thickness of plate.	Distance between supports	Intermediate stiffeners between supports. Size.	Intermediate stiffeners between supports. C to C distance.	Year of Installation	Head of water plus water hammer. *	Nature of scheme on which pipe is installed.
			Feet.	Inch.	Feet.	Inch.	Feet.		Feet.	
A	U.S.A.	South Edwards. N.Y.	10	¼"	†	3½x3x⅜	16'	1914	120'	HYDRO ELECTRIC
B	-do-	Los Angelis Aqueduct. Antelope	10'	⅜	(25)	None.	None	1916	250	
C	Sweden.	KUNGFORS	11 / 9	¼	41	"	"	1921	100	
D	-do-	ATRAFORS	13	7/32 to 9/32	44	"	"	1930	80	
			11½	¼	(44)	"	"	1947	80	
E	-do-	KIMMA	11	¼	44	"	"	1938	100	
			11	9/32	44	"	"		120	
F	-do-	HABY	13	7/32	33	"	"	1913	50	
	-do-	FRITSLA	9⅔	¼	44	"	"	1941	100	
	-do-	Edsale.	13	5/16	36	"	"	1947	110	
H	INDIA	Vaitarna.	10	3/8	9	"	"	Designed.		Water Supply.

Notes:- (1) Where figure is only approximately known it is encircled.

(2) All pipes except A have only ring girders at supports and no intermediate stiffeners.

† (3) Pipe A is continuously supported on earth work : No anchor blocks or expansion joints provided.

*(4) All of these pipes excepting H are installed as penstocks on hydro Electric Schemes. Where exact water hammer (as calculated or measured) is not known, it is assumed as 25% of static head.

~~F~~ 5-3 MIP 1151/60

Shri Joshi may be thanked for the information supplied. But the matter is only of academic interest for the present as the Ghatkopar C.B. canal agreement is already under progress, & no alternative can be taken into consideration now.

The difficulty of getting land also has to be taken into account.

B.S.S.

MIP 1151/40684 ~~5~~ 5

PWD

In view of the CE's instructions, the draft put up may issue -/7

12-5-57

14/5/57

14/5/57

Secy

H.M. 15/5

J.S. 14/5

15/5

5 WD

14/5/57

J 9/5

P. W. D.
File No. MIP 1151
Serial No. 40684

Sindoor J
11/5 9 T. S.
Urgent

No. MIP 1157-J

7/55-P.WD

Be (Bldg No 1)
21 May 1957.

To

Shri R. S. Joshi, BE. MIE(Ind)
M.R.San.I.(London)

1287, Shivajee nagar,
Poona 5

Subject: Dimensions of Steel Pipes.

Sir,

With reference to your letter
P.1 — dated the 29-4-57 addressed to
the Hon'ble P.W.D. I am directed
to acknowledge with thanks the
information supplied therein.

Yours faithfully
A.S. Ghosh

D.A. Nil

12.5.57.

Issue 15/5

Received 24/5

Received 24/5

आत्राफोर्स फौलादी तोयनी (स्वीडन)
Atrafors Steel Pipe, (Sweden)

SVENSKA VATTENKRAFTFORENINGENS PUBLIKATIONER 235 (1931:1)

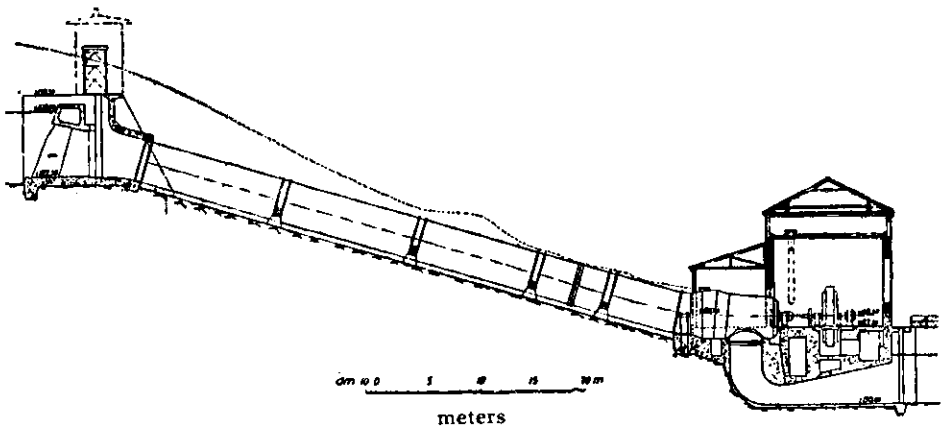
ATRAFORS VATTENKRAFTVERK

AV

INGENJOR AXEL NILSSON-HIORT

Tubledningarna.

Tubledningarna hava en diameter av 4,0 m och aro utförda av 6—7 mm järnplåt. Deras stackning, upplagsanordningar och förankringar framgå av fig. 11. Tubplintarna äro gjutna av betong och grundlagda på berg. Tuberna äro utförda utan förstyvningsringar mellan stöden, och största stödavståndet är 13,5 m.



(1) **तोयनीका व्यास** ...13'. 2
Diameter of Pipe

(2) **चद्दरका मुटाई** $\frac{1}{4}$" about
Thickness of plate $\frac{15}{32}$"to$\frac{18}{32}$"

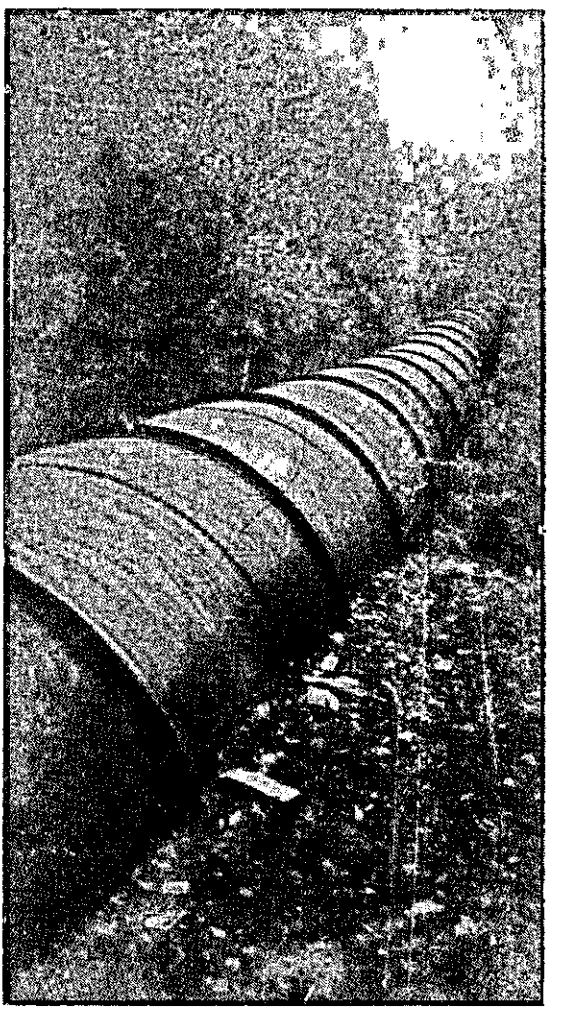
(3) **आधारस्तंभोकी दूरता** ...44
Distance between supports

(4) **मध्यतराण स्तभक** **नही**
Intermediate stiffeners Nil.

स्थापनाकाल 1925
Year of Installation of steel pipes

तोयनीका आयुर्मान वर्षोंमे 24
Age of steel pipes in years

एडवर्ड्स क्र.२. फौलादी तोयनी, (न्यूयॉर्क अमरीका)
Edwards No.2. Steel Pipe, (N.Y;U S.A.)



(1) तोयनी का व्यास... ...10
Diameter of pipe

(2) चद्दर की मुटाई ... .. $\frac{1}{4}$″
Thickness of plate

(3) उपष्टंभक का आकार $3\frac{1}{2}$″×3″×$\frac{3}{8}$″
Size of Stiffener ring

(4) स्तंभकों की दूरता 16′
Spacing of stiffeners

(5) मिट्टीके भरावपर आधारित तोयनी
Pipe resting on earthen embankment

(6) स्थापना काल 1914
Year of installation

(7) स्तंभक चढाये जानेका वर्ष 1938
Year in which Stiffeners added

(8) कवचका आयुर्मान, वर्षोंमें 37
Life of shell in years

Rao Bahadur,
N. S. Joshi,
B. E. (Civil), M. I. E. (Ind.),
M. R. San I. (London).
Retired Superintending Engineer. (Bombay P. W. D.)

73 61

1287 Shivajee-Nagar,
Poona 5.

Date 18th June 1951.

Dear Sir,

I had, in my letter of the 29-4-1951, sent for your perusal a statement giving dimensions of pipes with 10' to 13' diameters and having thickness of shell of 1/4".

Very often, seeing a photo, or original copy of plans carries greater conviction. I send herewith -

		Dia.	Thickness of shell.
(1)	Photo of EDWARDS NO.2 (N.Y. U.S.A.) steel-pipe.	10'	1/4"
(2)	Photo of sketch printed in original, Swedish publication : ATRAFORS (Sweden). (Original wording from the book in Swedish language has been photozinced and reproduced in the border above the sketch.)	13.2'	1/4" about 15/32" to 18/32"

19/6 29-4

ACKNOWLEDGED
No. PWD. 5
Date 19-6-51

Encl.
2 prints on art paper.

Yours Faithfully,

Hon.Dr.Jeevraj N.Mehta,
Minister for P.W.D.,
Government of Bombay,
Bombay State,
Bombay.

137/4062

Ack.
for Shri Mehta
June 6/51

P.T.O.

Ag 6

As personally instructed by H.M

copies of Statement at p. 3,

may be supplied to all the

local officers for information and

guidance as per draft at p. 15

Ky 25/6/57.

C.E.

7/6/57

Secy

Letter

63

PWD

No MIP. 1151-9

W.C Bihar Circle

28th June 1937

Bombay

To, The C.E/E. and
The S.Es ~~(illegible)~~ of Circles
The P.H.E. to Govt
All ~~the~~ Ex. Engrs ~~(illegible)~~

Subject:- Dimensions of steel pipes

I am directed to enclose herewith a copy of ~~the~~ 63 statement, showing dimensions of steel pipes of large size, for information & good guidance. This ~~informal very~~ useful information has been compiled and forwarded to hand by Shri N.S. Joshi ~~retired Superintending~~ S.I.E (I) Retd.

Sd/- of the Engr Bihar

for S.E. P.W.D

D.A.

~~Statement~~ 63

Issue ~~(illegible)~~
28/6

Statement showing dimensions of steel pipes of large size.

Hydro-Electric Works.

Sr. No. (Symbol)	Name of Country	Name of pipe line	Diameter. Feet.	Thickness of plate. Inch.	Distance between supports. Feet.	Intermediate stiffeners between supports. Size. Inch.	C to C distance. Feet.	Year of Installation.	Head of water plus water hammer * Feet	Nature of scheme on which pipe is installed.
A	U.S.A.	South Edwards N.Y.	10	¼"	✱	3½x3x3/8	16'	1914	120'	HYDRO ELECTRIC: Water supply.
B	-do-	Los Angelis Aqueduct. Antelope	10'	3/8	(25)	None.	None	1916	250	
C	Sweden.	KUNGFORS	11) 9)	¼	41	"	"	1921	100	
D	-do-	ATRAFORS	13	7/32 to 9/32	44	"	"	1930	80	
			11½	¼	(44)	"	"	1947	80	
E	-do-	KINNA	11	¼	44	"	"	1938	100	
F	-do-	HABY	11 13	9/32 7/32	44 33	"	"	1913	120 50	
	-do-	FRITSLA	9 2/3	¼	44	"	"	1941	100	
	-do-	Edsale.	13	5/16	36	"	"	1947	110	
H	INDIA	Vaitarna	10	3/8	9	"	"	Designed.		

NOTES :- (1) Where figure is only approximately known it is encircled.
(2) All pipes except A have only ring girders at supports and no intermediate stiffeners.
✱(3) Pipe A is continuously supported on earth work: No anchor blocks or expansion joints provided.
*(4) All these pipes excepting H are installed as penstocks on Hydro Electric Schemes. Where exact water hammer (as calculated or measured) is not known, it is assumed as 25% of static head.

True copy,

Y. R. Tendulkar,
Superintendent,
P. W. D. Sectt.

DDD.
28/6/51

Letter.

No.MIP 1151 J.

Public Works Department,
Bombay Castle (Bombay No.1),
28th June 1951.

To

The Chief Engineer, Bombay Electric Grid.
The Superintending Engineers of Circles.
The Public Health Engineer to Government.
All Executive Engineers.

Subject:- Dimensions of steel pipes.

.....

I am directed to enclose herewith a copy of the statement, showing dimensions of steel pipes of large size, for information. This useful information has been compiled and forwarded to Government by Shri N. S. Joshi, B.S.E.(I) Retired.

By order of the Governor of Bombay,

K. V. Joglekar,
Deputy Secretary to the Government
of Bombay, Public Works Department.

D.A.- Statement.

DDD.
28/6/51.

S/69

TELEGRAMS { "POWERFARM" BOMBAY.

TELEPHONE : 34153

PASHABHAI PATEL & CO.LTD.

Construction House, Ballard Estate

BOMBAY

To, The Executive Engineer
Upp. Left Bank Canal
Division Ghatprabha

Date, 2 7 51

Dear Sir

We acknowledge with thanks the receipt of your letter No. H 9 3/1951 *of* 26-6-51 *Covering* ~~Cheque~~ / ~~Cash~~ *for Rs.* 55 - *and have great pleasure in enclosing herewith our stamped receipt No.* 10 *for the amount.*

P.S. copy forwarded to the Under-Secretary to Govt. of Bombay P.W.D. Bombay for information.

Encl: Receipt

Yours very truly,

For PASHABHAI PATEL & CO. Ltd.

Record

11-7-51

Record

11/7

JBT 3/7

P. W. D.

File No. MIP 1151

Serial No. 57520

J

3-7-51

3/71

Water Rates:
Irrigation from the Gokak Canal,
Belgaum District.

GOVERNMENT OF BOMBAY.
Public Works Department.
Resolution No. 1604/36-II.
Bombay Castle (Bombay No. 1),
11th April 1950.

Read Government Resolution, Public Works Department, No. 1604/36-II, dated the 21st July 1948.

Letter No.M.I.6, dated the 13th September 1949, from the Executive Engineer, Ghataprabha Left Bank Canal Division, as under:-

"Reference: Your letter M.I.(6) dated 2nd August 1949."

"Government have sanctioned increased rates of Rs. 4/- for kharif, Rs. 6/- for Rabi and Rs. 10/- for two seasonal crops on the Gokak Canal, for a period of 2 years from 15th February 1949, in view of the abnormal rise in the prices of food grains and also to maintain uniformity in the water rates charged on the Deccan canals and this canal.

"2.During the period of one year that has passed since the date of issuing these orders the prices of food stuffs, though very high, have remained steady. In view of the streaneous efforts on all sides to "Grow More Food" it does not seem likely that there would be any rise in them in the near future. Also it is very difficult to say at present, whether the rates would go down. This also does not seem likely in the next couple of years or so until conditions regarding the production and distribution of food stuffs throughout India become more or less stabilized. There is practically no perennial irrigation on this canal and irrigation to other money crops such as cotton, tobacco has also been stopped, since the kharif season of this year. The question of preparing revised rates in respect of these crops does not therefore arise.

"3.Under the circumstances I would not recommend any change, either increase or decrease, in the rates already sanctioned by Government. The same rates as are current at present (vide accompanying schedule) may therefore be continued for the two years commencing from 15th February 1951.

"4.A statement showing the rainfall, acres irrigated and the revenue derived during the different seasons of the preceding 6 years from the year 1943-44 to 1948-49 is attached herewith."

Endorsement No.I.R.R.S.R.645, dated the 11th October 1949, by the Collector of Belgaum as under:-

"X X X

"2.The current rates may be continued for the two years commencing from 15th February 1951."

Endorsement No.M.I.(6), dated the 24th November 1949, by the Superintending Engineer, Karnatak Irrigation Circle, as under:-

"X X X

"2.....

"2. The Superintending Engineer agrees with the proposals made by the Executive Engineer in connection with water rates on the Gokak Canal.

"X X X"

Endorsement No.I.R.R./42, dated the 28th November 1949, by the Commissioner, Southern Division, as under:-

"X X X

"2.The conditions at the time of sanctioning the water rates still continue to exist and there is likely to be no material change in the same during the next couple of years. In the circumstances, the water rates, sanctioned in Government Resolution, Public Works Department, No. 1604/36-II dated 21st July 1948 may be continued for a further period of two years from 15th February 1951 as proposed by the Executive Engineer and recommended by the Superintending Engineer, Karnatak Irrigation Circle"

Endorsement No.S.T.216, dated the 5th January 1950, by the Settlement Commissioner and Director of Land Records as under:-

"X X X

"2. The proposal of the Executive Engineer, Ghataprabha Left Bank Canal Division to continue the existing water rates on the Gokak Canal, sanctioned in Government Resolution, Public Works Department, No.1604/36-II, dated 21st July 1948, for a further period of 2 years from 15th February 1951, as supported by the Collector of Belgaum, the Superintending Engineer, Karnatak Irrigation Circle and the Commissioner, Southern Division is recommended."

Endorsement No.Res.Irri./191, dated the 8th February 1950, by the Director of Agriculture as under:-

"X X X

"2.The proposal of the Executive Engineer, Ghataprabha Left Bank Canal Division to continue the existing water rates on the Gokak Canal, sanctioned in Government Resolution, Public Works Department, No.1604/36-II, dated the 21st July 1948, for a period of 2 years from the 15th February 1951, is recommended."

Endorsement No.I.R.R./42, dated the 13th February 1950, by the Commissioner, Southern Division, as under:-

"X X X

"2.The existing water rates may be continued for a further period of two years from 15th February 1951 as already recommended in this office endorsement of even number dated 28th November 1949".

RESOLUTION: Sanction is accorded to the continuance of the following water rates for irrigation on the Gokak Canal for a further period of two years ending the 14th February 1953.

"1..... ..

		Rs.	As.	P.
1.	Perennial twelve months- 15th February to 14th February.	40	0	0
2.	Perennial eight months - 15th June to 14th February.	25	0	0
3.	Kharif Crops - Monsoon season 15th June to 14th October.	4	0	0
4.	Rabi Crops Cold weather season 15th October to 14th February.	6	0	0
5.	Two season crops - 15th June to 14th February.	10	0	0
6.	Hot weather crops - Hot weather season, 15th February to 14th June.	15	0	0
7.	Single watering for money crops, viz. Sugarcane, Tobacco and Cotton.	5	0	0
8.	Single watering for crops other than those specified at the Serial No.7 above.	2	3	0
9.	Sugarcane perennial Rabi- 15th October to 14th February.	15	0	0
10.	Sugarcane perennial Kharif - 15th June to 14th October.	10	0	0

NOTE:- (i) Tur, when sown as a mixed crop, with any Kharif Crop in the Monsoon season shall be charged the monsoon season rate plus the single watering rate for the post seasonal watering that may be required in the cold weather season.

(ii) In the case of pomegranate (perennial eight months), if water is supplied during the period from the 15th June to 31st December it should be charged for at the rate of Rs. 9-8-0 per acre.

(iii) When "San" is grown along with maize, the water rates for this mixed crop should be Rs. 2-8-0 per acre. When "San" is grown for manurial purposes only, the water rate should be Re. 1 per acre

(iv) For irrigation by lift by mots worked by bullocks and for irrigation by lift by power pumps, the water rates should be half and three-fourths of the flow rates respectively.

2. The Superintending Engineer, Karnatak Irrigation Circle, should submit in due course, proposals for the water rates to be levied with effect from the 15th February 1953.

By order of the Governor of Bombay,

P. K. K. Murti,

Under Secretary to Government.

G.R.xxxxxx.

F. 74

G.R., No.1604/36-II, P.W.D., dated the 11th April 1950.

To

The Finance Department.
The Agriculture and Forests Department.
The Revenue Department.
The Commissioner, Southern Division.
The Chief Engineer to Government, Public Works Department.
The Director of Agriculture.
The Settlement Commissioner and Director of Land Records.
The Superintending Engineer, Karnatak Irrigation Circle.
The Collector of Belgaum.
The Accountant General, Bombay.
The Executive Engineer, Ghataprabha Left Bank Canal Division.

No. of 1950.

Copy forwarded for information and guidance to-

VMW.
11/4/50.

87 75

No. B.M.1.4

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
C.V.Dharwar, 29th May 1951.

To

The Chief Engineer to Government,
Public Works Department,
Bombay-1.

Subject: Irrigation under the Ghataprabha Left Bank Canal.

It is proposed to start irrigation under the new Ghataprabha Left Bank Canal from the 15th of June 1951, from mile 0 to 8 and to provide irrigation facilities to about 1600 acres of new land in the limits of Pamaldinni village in Gokak Taluka and Jagnur village in Chikodi taluka of Belgaum District. As it is more or less an extension of the Gokak Canal it is proposed to levy the same water rates as are current under the Gokak Canal to receive water applications on form No.VII.

For the present the Irrigation will be restricted mostly to Kharif and to a small extent for rice under 8-months. This may kindly be approved.

29/5

Superintending Engineer, K.I.C.

X 8/76

J 31/5

5-21 30/5

P. W. D.

File No. MIP 1151

No 47135

J

Date of

31/5 30-5-57

3 8 77

No. B.M.I.4

Office of the Superintending Engineer,
'Karnatak Irrigation Circle',
Camp via Dharwar, 29th May 1951.

To

The Chief Engineer to Government,
Public Works Department,
Bombay-1.

Subject:- Irrigation under the Ghataprabha Left Bank Canal.

It is proposed to start irrigation under the new Ghataprabha Left Bank Canal from the 15th of June 1951, from mile 0 to 8 and to provide irrigation facilities to about 1600 acres of new land in the limits of Pamaldinni in Gokak Taluka and Jagnur village in Chikodi taluka of Belgaum District. As it is more or less an extension of Gokak Canal, it is proposed to levy the same water rates as are current under the Gokak Canal to receive water applications on form No.VII.

For the present the Irrigation will be restricted mostly to Kharif and to a small extent to rice under 8-months. This may kindly be approved.

Superintending Engineer, K.I.C.

Copy submitted to the Hon'ble Minister for Public Works & Housing, Bombay.

30.5.51

X 8878

J 31/5

F. W.

File No. MIP 1151

Serial No. 47342

Pl. reject
4 Sheets
31/5

J Bv
Assistant
30.5.57

79 Secy

In DP 1167/46 7½

P.W.D

The work of constructing the Ghataprabha Left Bank Canal Project (0 to 46 miles, is in progress and miles 0 to 8 have now been completed. The SE & IC accordingly proposes to start irrigation for the above 8 miles from the 15-6-57 thereby provide irrigation facilities to about 1600 acres of new land. It is also proposed to levy the same water rates as are in force for the Ghataprabha canal vide G.R. No 1604/36-II dated the 11-6-57. The proposal of the SE may be approved as it is practically an extension of the Ghataprabha Canal. Irrigation for the present will however be restricted only mostly to Kharif & to a small extent to

& Slip A copy of Sec. put up

4/1/58

to recd under 6-months

2. The A.S.F.D., R.D. & F.D.

may see me before issue

of the orders for information.

The DB & DE(R)

9/6/57

2.6.57. 11/6/57

4/11/6/57

11/6/57

Issue 11/6/57

Sent to ASFD / RD / FD 14-6-57

AGRICULTURE & FORESTS
(5) DEPARTMENT
File No. PWD MTP 1151/47135
Date 14th 1957
Serial No. F 1757

A.R.D.

Seen and passed on to R.D.

8/6/57.

Noted by H.S.

Sent to R.D. 18/6/57

REVENUE DEPARTMENT
File No. 13
Date 19 JUN 1957
Serial No. F

7987

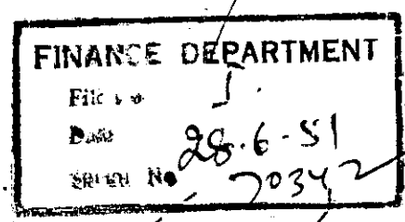
~~47~~ 81. Ltr 15 F.D -7 R.D.

Seen and passed ~~on to~~ to F.D

lhs
20/6/51
A.S.

M 23/6/51

F.D



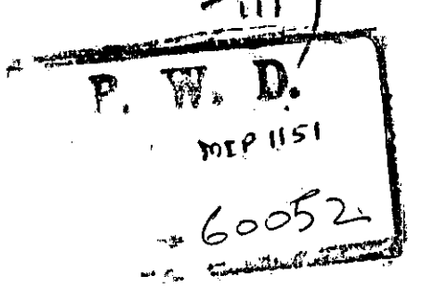
Finance Dept-ll.
B.v.III

The proposal made by the P.W.D may be agreed to.

N.D.
2.7.51.
3.7.51

S77

U. O. R. to the P.W.D.
dt. 9.7.51.



11-7-51

S77

P.W.D.

Submitted with reference to the above note written. 5-6

2. The R.D., ~~the~~ the A.T.D. & T.D having agreed to the proposal the draft put ~~to~~ No. 9-A up may issue

20.7.51

21/7/51

21/7/51

D.S.

Secy.

Asst PWD 23/7

D.S. 23/7

24/7

D.D

Letter ~~I~~ 83

No. MIP 1151 J

P.W.D.
(Bldgs No. 1),
B.C.
1st ~~July~~ Aug. 1951

To
The SEs, K.I.C.

Subject Irrigation under the Ghataprabha L.B. Canal

Reference Your letter No. B.M.I.4 R.3 dated the 29-5-51

2. Your proposals to start irrigation under the new Ghataprabha L.B. Canal from mile 0 to 8 and to levy the same water rates sanctioned for the Gokak Canal under G.R. No. 1604/36-II dated the 11-4-50, are approved.

kept below X

3. Water applications should be received in Form No VII and for the present irrigation should be restricted to Kharif to a small extent to meet under

10-1/84

under eight months as proposed

By order, etc
A.S. to Govt.
P.W.D.

D.A. Nil

Copy forwarded to
the R.D.,
the A. & F. D.
the T. D
the Dir of Agl.,
the Collr. of Belgaum
the Agl. Bdar,
the Exe Engr, J. L B C. Dn
the Settlement Commr. & D. of L.R.

for information
2.7.84

Issue LCO Blanks to the three Offices
31/7

27/1 85

Letter.

No.WLP 1151 P. Public Works Department,
Bombay Castle (Bombay No.1),
1st August 1951.

To

The Superintending Engineer,
Karnatak Irrigation Circle.

Subject:- Irrigation under the Ghataprabha
Left Bank Canal.

.....

Reference: Your letter No.S.I.C.A. dated the 29th May 1951.

2. Your proposals to start irrigation under the new Ghataprabha Left Bank Canal from mile 0 to 8 and to levy the same water rates sanctioned for the Tokak Canal under Government Resolution No.1604/36-II, dated the 11th April 1950, are approved.

3. Water applications should be received in Form No.VII and for the present irrigation should be restricted so that it end to a small extent to rice under eight months as proposed.

By order of the Governor of Bombay,

Assistant Secretary to the Government of Bombay, Public Works Department.

Orders issued after ... with R.D., A.F.D & F. ... with ... which ...

D.O.- Nil.

Copy forwarded to -

the Revenue Department,
the Agriculture and Forests Department,
the Finance Department,
the Director of Agriculture,
the Settlement Commissioner and Director of Land Records,
the Collector of Belgaum,
the Accountant General, Bombay,
the Executive Engineer, Ghataprabha Left Bank Canal Division,

ISSUED 4-8-51

for information.

10. DED. 1/8/51

D D

A.S.E.

Letter
No. G-34

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, -1951.

To

The Chief Engineer to Government,
Public Works Department.
Bombay.

Subject:- Ghataprabha L.B.C.Scheme:
Tender for the construction of Aqueduct in mile No.9 and approach Canal near Jagnur village of the--

Reference: Government letter P.W.D.No.9194/36-I-B-(II),dated 8-1-1951.

2. The contract documents for the above work in favour of Messrs Mckenzies, Ltd., Contractors, are submitted herewith duly completed for favour of your countersignature in token of acceptance and return.

3. Para 3(a) & (b): The instructions are noted.

4. Para 4: This is being dealt with separately.

5. A copy of the tender is also sent herewith for favour of forwarding the same to Audit office, after doing the needful.

D.A.-
1 tender
in duplicate.

Superintending Engineer,K.I.C.

P. W. D.

File No. MIP 1151

Serial No. 72971

MIP. 1151 / 77971

3/1/89

D. W. D

J. Br.

The S.E., K.I.C., has submitted the Contract documents in connection with the work of Constructing Aqueduct on mile No. 9 and approach canal near Jagnur for the countersignature of the Chief Engineer. The tender for Rs. 7,06,712/- in favour of M/s Mckenzies, Ltd., was accepted on G.L. No 9194/36-I.B.(II), dated 8.1.51. The C.E. will kindly sign at P 2 of the B-2 Form after which it will be returned to the S.E. The duplicate copy will be duly completed and forwarded to the A.G., Bombay, for his record.

2. The draft put up for approval may issue

Thro: S.E. (3)

19.9.51

C.E.

X Slip B
File 9194/36 III
P 103
Put up

Slip A
Put up
below

Kept below

Done

bis

MIP. 1151/7797

~~8~~ 103 91

No. MIP. 1151-J Letter

P. W. D.
BC (Bombay No. 1)
21st Sept. 1951.

To

The S. E., K.I.C.

Subject:— Ghataprabh Left Bank Canal Scheme.
Tender for the Constn. of Aqueduct-
in mile No 9 and approach Canal
near Jagnur village of the —.

* Slip A. The Contract documents* for the above work
in favour of M/s Mckenzies, Ltd., Contractors,
received with your letter No G. 34, dt 7.9.51, P1
are returned herewith duly ~~countersigned~~ accepted.
Signed by the C.E., P.W.D

D.A. Contract-
documents.

A.S.
for Chief Engineer, P.W.D.

Signed Slip A
Dt 4/9/51

Copy, together with a copy of the S.E's letter, P1
refd.

X/92 B

refd to, and duplicate copies of the # Contract documents, forwarded to the A.G., Bombay, in continuation of G.E. X No 9194/36-SB.(II), of 8.1.51.

9.9.51.

Kabir bela

25/9/51 withdrawn

+ 93

No. G-34

Office of the Superintending Engineer
Karnatak Irrigation Circle,
Dharwar, 19-7-1951.

To

The Chief Engineer to the
Government of Bombay,
Public Works Department,
Bombay-1.

Subject: Tenders for culvert Nos. 11, 12, 13, 16 and 17 on Ghataprabha Left Bank Canal.

Tenders were publicly invited in B-2 form for the above five culverts pertaining to the Project of Ghataprabha Left Bank Canal. In all 6 tenders were received, one for each of the 4 culverts, No.11, 12, 13 and 17 and two for culvert No.16. A comparative statement showing costs (i) as per rates of 1938-39 ~~project~~ plus 100 per cent as sanctioned, (ii) as per current schedule of Ghataprabha Left Bank Canal Division, and (iii) as per tendered rates is enclosed. As regards culvert No.16, the lowest tender is taken to work out the tendered cost.

2. There being no prospects of getting more favourable rates even if tenders were recalled, the same tenderers were negotiated to reduce the rates. Shri.J.N.Lingras tenderer for culvert No.11 and 17 however agreed to reduce the rates of both the tenders by 5 per cent if the works are given on A-2 tenders. There seems to me no objection to let out the works to him on A-2 tenders.moreover due to inadequate funds this year and to be on the safer side it is considered advisable to let out some works on A-2 tenders to enable the Executive Engineer to restrict the expenditure to the extent of the funds available. Therefore, the 5 per cent reduction is taken into account for tendered cost in the comparative statement for culvert Nos. 11 and 17.

3. From the comparative statement it may kindly be seen that the percentage increase in the tendered cost over the current scheduled rates varies from 2 to 9. But when compared with rates approved by Government for the works of Jagnur Aqueduct of the same project and in the same locality, please vide Government Letter, P.W.D.No.9194/36-I.B.(II) dated 8-1-1951, the tendered rates are reasonable. The costs worked out on the basis of the tendered rates of Jagnur Aqueduct are given in column 5 of the comparative statement for reference.

4. Five detailed comparative statements, one for each culvert, are also enclosed for favour of reference and return.

with 6 tenders

5. I would, therefore, request that Government in your concurrance may kindly be moved to accord its sanction to high rates at an early date, so as to enable the Executive Engineer to accept the tenders and start the works immediately.

6. Since the rates of all the five tenders are lower than those already approved by Government for the work of Jagnur Aqueduct I have asked the Executive Engineer to make preliminary arrangements to start with the works so as to take best advantage of the working season.

D.A: 6 comparative statements.
6 tenders
3 chalans

Superintending Engineer, K. I. C.

BR/18-7-

1951

Letter
No. G-34

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 1951.

To

The Chief Engineer &
the Government of Bombay,
Public Works Department.
Bombay-1.

Subject:- Tenders for culvert Nos. 11, 12, 13, 16 & 17 on Ghataprabha Left Bank Canal.

I have to invite a reference to this office No.G-34 dated 19-7-1951 and to request the favour of obtaining Government sanction to the high rates and returning the tenders at an early date for further action.

Yours

Superintending Engineer, K. I. C.

BR/9-8.

J13/8

MIP 1151

70583

J
13-8 J7

MIP 1151/64038/70583

P. W. D.
J

Very Urgent.

The S.E., K.I.C., has forwarded 6 tenders for constructing culverts Nos.11, 12, 13, 16 & 17 on the Ghataprabha Left Bank Canal. A comparative statement prepared by the S.E. is kept below. This shows (1) the 1938-39 rates plus 100 p.c. increase, (2) current schedule of rates of Ghataprabha Left Bank Canal Division and (3) present tendered rates.

2. The present tendered rates for the various culverts are given below :-

Culvert No.	Current Scheduled rates.	Tendered rates.	
11.	Rs. 61,137.	Rs.63,197	4%
12.	Rs. 23,878.	Rs.26,130	9%
13.	Rs. 27,685.	Rs.30,138	9%
16.	Rs. 32,829.	Rs.34,737	6%
17.	Rs. 94,984.	Rs.97,196	2%

These tendered rates though above the current scheduled rates of the Dn. are considered reasonable when compared with the rates approved for Jagnur aqueduct of the same project approved in G.L.No.9194/36-A(II), dated the 8-1-51.

3. The S.E. entered into negotiations with the contractors concerned with a view to reduce the rates. One of the contractors, Shri Lingras, who has tendered for culverts Nos.11 and 17 appears to have agreed to reduce the rates of both tenders by 5% if the works are given on A-2 forms. This has been recommended by the S.F. for the reasons stated by him in para. 2 of his letter. The proposal may be approved.

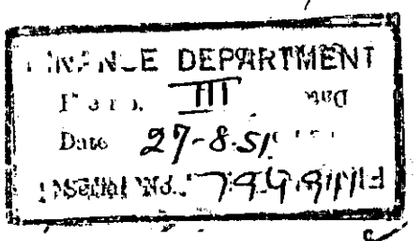
4. If approved, the rates mentioned in para.2 above for all the ~~five~~ six tenders may be approved as recommended by the S.I. and the tenders returned to him. The F.D. may see u.o. before issue of orders.

Through B.Br. and D.E.(I).

Very Urgent

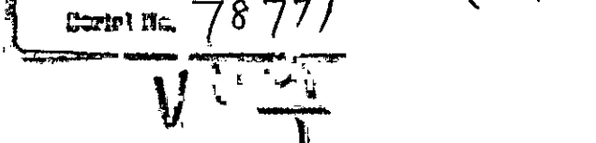
M.O. to F.D. (with file 9194/86 III @ 25/8/51.
and file of Tenders)

Issue M.O. (5-9-51)
.24/8



Seen and returned to the PNS.

It is presumed that there is
[illegible] from these words.



7+99 MIP 1151/7877.

P.W.D.

J. Br.

Submitted with refce. to this Deptt. nor dated 25-8-51. ¶5-6

2. The F.D. having agreed to the proposals contained ¶6 therein, the draft put up for approval may issue. ¶7

3. In view of the urgency of the case, the draft ¶10 telegram put up may issue first.

Hro: X. Br. & D.E.(J).

18.9.51.

×Re. 70's Irrumption. S- 18/9

4. There is a provision of Rs 27,68,520 for the Ghataprabha L.B. Canal for the current year.

Secy

No.MIP 1151-J. Letter. Public Works Deptt.
B.C. (Bombay No.1),
19th Sept.1951

To

The Supdg.Engr., Karnatak Irrigation Circle.

Subject:- Tenders for culvert Nos.11, 12, 13, 16 and 17 on Ghataprabha Left Bank Canal.

....

Reference: Your letter No.G.34, dated 10th Aug.1951.

2. Govt.is pleased to accept the rates of the five tenders for the works of constructing the following culverts in connection with the Ghataprabha Left BankCanal:-

Culvert No.			Tendered rates Rs.
11	...	...	63,197
12	...	...	26,130
13	...	...	30,138
16	...	...	34,737
17	...	...	97,196

3. Your proposal to give contract for works in connection with the culverts Nos.11 and 17 ~~~~ given on A-2 forms is approved.

4. The comparative statements, tenders and chalans received with your letter No.G.34, dated 19th July 1951, are returned herewith.

By order of the Govt.of Bombay,

Asstt.Secy.to the Govt.of Bombay,
Public Works Deptt.

D.A.-File of 6 comparative statements, 6 tenders and 3 chalans.

Copy to

the F.D.,
the A.G., Bombay (through the F.D.),
the Chief Engr., Public Works Deptt.,
the Ex.Engr., Ghataprabha Left Bank Canal Divn..

for information.

Orders issued with Finance Department.
Notes remain with this Department and can be seen if required.

State. Telegram. Ordinary.

From - Bomworks, Bombay.

To - ~~The~~ Supdg.Engr., Karnatak Irrigation Circle, Dharwar.

Reference: Your letter No.G.34, dated 19th July 1951. Rate for for culverts
tenders as recommended by you accepted. Formal orders follow.

No.MIP 1151-J.

Public Works Deptt.,
B.C.(Bombay No.1),
19th Sept.1951.

Telegram
19-9-51.

Copy, by post in confirmation.

Asstt.Secy.to the Govt.of Bombay,
Public Works Deptt.

Copies to the Ex.Engr., Ghataprabha Left Bank Canal Divn.

18.9.51.

MKP.
18/9/51.

H 103

State Telegram Ordinary.

Bombay, 19th September 1951.

From - Bomworks, Bombay.

To - Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar.

REFERENCE YOUR LETTER NO. G.34, DATED 19TH JULY 1951.
RATES FOR TENDERS FOR CULVERTS RECOMMENDED BY YOU ACCEPTED.
FORMAL ORDERS FOLLOW.

No. MIP 1151 J.

Public Works Department,
Bombay Castle (Bombay No.1)
19th September 1951.

RECEIVED 19/9/51

Copy, by post in confirmation.

for Assistant Secretary to the Government
of Bombay, Public Works Department.

3
VMM.
19/9/51.

Copies to the Executive Engineer, Ghataprabha Left Bank Canal Division.

DIR 19/9

13 T 105

Letter.

No. MIP 1151 J. Public Works Department,
Bombay Castle (Bombay No.1),
19th September 1951.

To

The Superintending Engineer,
Karnatak Irrigation Circle.

Subject:- Tenders for culvert Nos. 11, 12, 13, 16 and 17 on Ghataprabha Left Bank Canal.

Reference: Your letter No. C.34, dated 10th August 1951.

2. Government is pleased to accept the rates of the five tenders for the works of constructing the following culverts in connection with the Ghataprabha Left Bank Canal:-

Culvert No.		Tendered rates.
11	....	63,197
12	....	26,130
13	....	30,138
16	....	24,737
17	....	97,190

3. Your proposal to give contract for works in connection with the culverts Nos. 11 and 17 on A-2 forms is approved.

4. The comparative statements, tenders and chalans received with your letter No. C.34, dated 10th July 1951, are returned herewith.

By order of the Governor of Bombay,

Assistant Secretary to the Government of Bombay, Public Works Department.

D.A.- File of 6 comparative statements, 6 tenders and 3 chalans.

Copy to -

the Finance Department,
the Accountant General, Bombay (through the Finance Department),
the Chief Engineer, Public Works Department,
the Executive Engineer, Ghataprabha Left Bank Canal Division,

for information.

6
Vtl.
19/9/51.

No. G-34

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 12th Septr.1951.

To

The Chief Engineer to Government,
Public Works Department,
Bombay-1.

Subject:- Tenders for Culvert Nos. 11, 12, 13, 16 and 17 on Ghataprabha Left Bank Canal.

Reference: This office No.G-34 dated 19-7-1951 and G-34 dated 10-8-1951.

The favour of obtaining Government sanction to the high tendered rates and returning the tenders at an early date is requested as the other tenderers are pressing for the refund of the earnest money paid by them.

Superintending Engineer, K.I.C.

MIP.1151/79763 P.W.D. 45 / 104

T. Bir

In view of the G.L.
and telegrams at pp. 9-10 ante
no action is necy on these
papers

Record

5-10-51

Supdt. 17/9

MIP 1151

79563

F.I 3/10 J 15-9-51

J S 10/12/37 MIP 1151

This case was sent twice to the A.G's Office but the receipt clerk from that office has returned it back saying that the letter No. MIP 1151 dt 21-9-37 p 37 is not signed at X The Branch Concerned will please see whether such procedure is observed in this Deptt. and take the necy. action

A.G.S.
1-10-37
To

JB

J.B.
4/10 2. It will be seen from the above note that-

~~22~~ 11 ~~40~~

that the Clerk receiving the post in the office of the A.G. Bombay, refused to accept Govt. Endt. No MIP. 1151-J, dt 21-9-51, together with its accomplts on the plea that there is no signature of the officer, who has signed it, below the endt. ie. at the place marked X on p 37 ante. p 37

3. This Deptt. has been and is issuing daily many endts. below letters similarly signed by various officers including the A.G., Bombay. So far there has not been any demand on the part of any officer and for p 37

that

3. ## III MIP 1151

1-35

that matter the A.G., Bombay, for change of the existing procedure followed by this Deptt. long since. It appears that the present instance is due to the ignorance of the Clerk concerned about the procedure followed by the Deptt. These papers may, therefore, be shown no. to the A.G., Bombay, with a request to retain the G.E. No MIP 1151-F, d. 21-9-51 and its accompls. at pp 1 to 37 ante. and return the remaining papers to the P.W.D. Secn.

2919

WM 244

4.10.51.

Thro: F.Br.

Sag. 4-10-51

4/10/51

A.O. to A.G., Bombay. d. 10.5.

5/10

A.G's P.W.V. 1. 15/10.

W.M. P.W.V.I

113
125

A.G.'s Office, Bombay.

Returned with compliments.

Government Order No. M 1 1151
dated 21- -51 and its accompaniments have
been entered in the office.

C. to ovt. in

No. WW- 1007 dt. 19 Oct. 51.

m/ 17-10

MIP 1151
90368

1/6 114

J.Br

P.W.O.

Submitted with reference to this Deptt. wor dated 8.10.51

2 Sheet papers may now be recorded.

22.10.51

Thro: D.S.*

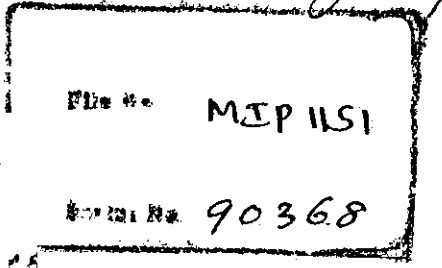
25-10-57

* for information

RVR 23-10-57

Supdt

J 20/10



J

7-1 T.

III

Construction of Ghataprabha Left Bank Canal by the Bombay P.W.D. in connection with the Grow More Food Scheme - Memo of Terms and conditions for laying á temporary road within Railway limits between Hukeri Road and Raibag Stations, Poona Branch.

The permission to lay a temporary road within Railway limits as per plan No.HUI/LT/6 attached will be granted to the P.W.D. for a specific period of two years in the first instance, and to be renewed thereafter annually with the consent of the Railway Administration.

2. The proposed road would be too close to the toe of the Railway embankment at miles 69/1-4, 69/7-24 and 71/19-20 and therefore in these mileages it will have to be realigned outside the Railway boundary and then join up into the Railway boundary.

3. The proposed road will only be for the private use of the P.W.D.for the specific purpose of the project and not a public thorough fare.

4. The P.W.D.should erect and maintain at their cost so long the proposed road is under use by them suitable Notice Boards to ensure that the above provision is complied with.

5. The P.W.D.Shall also erect and maintain at their cost suitable caution boards wherever the P.W.D.road crosses any Railway road warning the motorists of a road crossing ahead. These caution boards should be erected not only on the P.W.D.road but also on the Railway Road crossed

6. The P.W.D.shall be solely responsible for any damage, accident or death or injury to any person or property occuring on the land permitted to be made use of by them, provided such damage, accident, or death or injury shall be caused by their traffic and the P.W.D.shall hold the Railway Administration indemnified in respect of all claims for such damages or death or injury or accident as afore-said.

7...

117 - 34

7. The P.W.D.Shall pay the Railway Administration a nominal fee of Rs.12/- per annum so long as they use the Railway land for road purposes.

8. The P.W.D.shall pay in addition to the rent ~~anny~~ any rates and taxes levied on the land or structures.

9. Any structures or other assets erected on the land by the P.W.D.during their occupation should be demolished and the land handed over to the Railway in the same condition in which it was originally taken over on the termination of their occupation.

10. The Railway Administration shall not be liable for any payment of compensation to the P.W.D. in respect of the road when it is no longer required by them for use.

Signed by the General Manager, M.&S.M.Ry.,Madras for and on behalf of the President of the Union of India.	Signed by the Executive Engineer,Ghataprabha Left Bank Canal Division for and on behalf of the Government of Bombay.
Date.....	Date.....

121 - 24

Letter

No.Gh.L.B. Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 28th December 1950

To

The Secretary to Government,
Public Works Department,
Bombay.

Subject:- Laying a temporary road within Railway limits between Ghataprabha Station to Raibag Station.

The construction of Ghataprabha Left Bank Canal is now in progress and extends over the first 38 miles of the Canal. The construction of the north branch of this Canal which is 18 miles in length is expected to start early. This branch Canal moves in West-North-West direction from the 32nd of the main Canal under construction and crosses the Railway line near about Raibag Railway Station on the M.S.M.Railway. The shortest route for the inspection of this branch of canal either by the Executive Engineer or others from Ghataprabha is to go along the Railway line. It would also be necessary for some subordinates and officers to ply between Ghataprabha and Raibag in Jeep frequently while they are on duty. The tract being a dry one, the existing cart track along the side of the Railway between Ghataprabha and Raibag Railway Stations, if repaired at small cost, would serve the purpose.

2. The Executive Engineer, Ghataprabha Left Bank Canal Division has proposed to repair the cart track and make it fit for Jeeps temporarily during the construction period of the Canal. The Railway authorities when contacted have also agreed to the above, provided an agreement is signed and a nominal fee of Rs.12/- per annum is paid.

3. The road in question is considered necessary for the speedy execution of the canal work as it will provide direct communication to work spot. When the work progresses further, it will also be necessary to open a Sub-Division at Raibag and the road will be essential for easy communication and transport. I agree with the proposal of the Executive Engineer and consider such a communication desirable in the interest of work. The cost involved will be nominal and is trifling when compared with the benefits derived from the same.

4. It is, therefore, requested that the above proposal may kindly be sanctioned in accordance with paragraph 327 of Land Acquisition Manual.

5. A draft agreement received from the Railway Authorities and a tracing showing the proposed road are submitted herewith for favour of perusal and approval.

D.A.-
as above.

Superintending Engineer,
Karnatak Irrigation Circle.

Through the Chief Engineer to Government, Public Works Department, Bombay, with compliments.

123

Letter

No.Gh.L.B. Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 28th December 1950

To

The Secretary to Government,
Public Works Department,
Bombay.

Subject:- Laying a temporary road within Railway limits between Ghataprabha Station to Raibag Station.

The construction of Ghataprabha Left Bank Canal is now in progress and extends over the first 38 miles of the Canal. The construction of the north branch of this Canal which is 18 miles in length is expected to start early. This branch Canal moves in West-North-West direction from ~~the~~ 32nd of the main Canal under construction and crosses the Railway line near about Raibag Railway Station on the M.S.M.Railway. The shortest route for the inspection of this branch of canal either by the Executive Engineer or others from Ghataprabha is to go along the Railway line. It would also be necessary for some subordinates and officers to ply between Ghataprabha and Raibag in Jeep frequently while they are on duty. The tract being a dry one, the existing cart track along the side of the Railway between Ghataprabha and Raibag Railway Stations, if repaired at small cost, would serve the purpose.

2. The Executive Engineer, Ghataprabha Left Bank Canal Division has proposed to repair the cart track and make it fit for Jeeps temporarily during the construction period of the Canal. The Railway authorities when contacted have also agreed to the above, provided an agreement is signed and a nominal fee of Rs.12/- per annum is paid.

3. The road in question is considered necessary for the speedy execution of the canal work as it will provide direct communication to work spot. When the work progresses further, it will also be necessary to open a Sub-Division at Raibag and the road will be essential for easy communication and transport. I agree with the proposal of the Executive Engineer and consider such a communication desirable in the interest of work. The cost involved will be nominal and is trifling when compared with the benefits derived from the same.

4. It is, therefore, requested that the above proposal may kindly be sanctioned in accordance with paragraph 327 of Land Acquisition Manual.

5. A draft agreement received from the Railway Authorities and a tracing showing the proposed road are submitted herewith for favour of perusal and approval.

D.A.-
as above.

Superintending Engineer,
Karnatak Irrigation Circle.

Through the Chief Engineer to Government, Public Works Department, Bombay, with compliments.

60
1/ 124

3/1
P 1151
~~8194/36~~
648

fwd L
4/1

MEP 1157

~~9194/36/648~~

F. W. D.

125-

I.B.(II).

The S.E.,K.I.C. has submitted a proposal for repairing the cart track between Ghataprabha and Raibag Railway Stations for use of the subordinates and officers who ply their jeeps while they are on duty. The construction of the Ghataprabha Left Bank Canal is reported to be in progress and extends over the first 38 ~~inches~~ miles. To inspect the north branch of this canal (vide plan attached), the shortest route that can be taken is along the Railway line (M.& S.M.). The land presumably belongs to the Railway who have no objection to the Ex.Engr. repairing the cart track provided a nominal fee of Rs.12 per annum is paid along with an agreement to be drawn with the Railway. The Supdg.Engr. considers that the road in question is necessary for the speedy execution of the canal work as it will provide direct communication to work ~~spot~~ site. Furthermore, it will be necessary to open a sub-division at Raibag later on and the road will be essential for easy communication and transport. As the cost involved will be nominal (this is not known) when compared with the benefits derived from the same, the proposal of the S.E. viz. to repair the cart track, enter into agreement with the M.&.S.M.Railway and to pay an annual rental of Rs.12 per annum may ■■ be approved. The F.D. may see u.o. before issue of orders.

Thro' A.B.(II) & D.E.(I).

...ENT
PW R I
...No.
Date 19.1.51
Serial No. 31555

9.1.51

VA/9/1/51.

2. The expenditure may be met from the provision for the Ghataprabha L.B Canal under the head "66"

Shan Saw 19/1/51

15/1/51

Yj 16/1/51

Addr. to F.D. dated the 19th Jany. 1951

~~+2~~ 2/6

FD
PWRI

In the first instance the PWD may be requested to submit the details of ~~work that~~ the cost that will have to be incurred in repairing the existing cart-track between Ghataprabha & Raibag

22/1/51
23

23

LWR to the PWD dt 27-1-51

9(1)
30/1

P. F. T.
~~4194/36~~ M.P. 1157
9384

DS ZE
31-7-51

Rm

13 — 17

S.(S-D.

SB(II)

11-12) Submitted with the necessary draft for approval

5.14

Thru DE(I)

3.2.57

31/1/57

ADC

Letter

No. MIPUS ~~9/SC/126~~ - 9/B(T)

PWD
Br (Rly no 1)
8th Feby. 1957

To

The SE. & I, 6

Subject: Laying a temporary road within Rly. limits between Bhatapraha Stn. to Railway Stn

Reference your letter No. Sh.L.B dated the 28-12-56. I/7

2. Before considering the question of repairs to the cart track between the Bhatapraha & the Railway Railway Stn for the use of the staff, &c., you are requested to report the details of the cost that will have to be incurred therefor

D.A. Nil

By order, etc
A.E. I/Gaut
PWD

3/1/57.

Issued
10/2-57

Dy. Chief
2/7

Divisional Officer
I/Gaut

Contd (11-4-57)

~~15~~
~~141~~ P.W.N.
129 J

Urgent

The S.E., K & C expedited under
G.M. No 9194/36-J dated 12-7-51
marked urgent

10.7.51.

12-7-51

Issued
13/12/57

Issue exp.
12/7

Arrear (13-9-57)
13/7

131

Letter
No. Gh.L.B.

Office of the Superintending Engineer,
Karnatak Irrigation Circle,
Dharwar, 16-7 — 1951.

To

The Chief Engineer to Government,
Public Works Department, Bombay.

Subject:- Laying a temporary road within Railway limits between Ghataprabha Station to Raibag

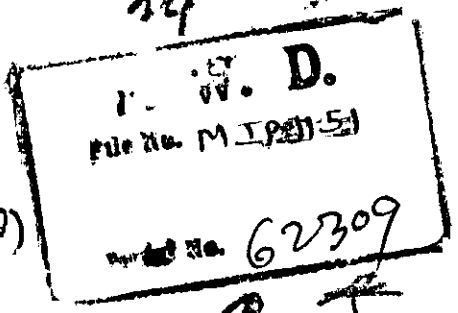
Reference: G.L.P.W.D.No.9194/36-I.B.(II), dated 8-2-1951. p. 14 ante

2. The cost of repairs to the Cart track between Ghataprabha and Raibag Railway Stations will be Rs. 1013/-.

3. Further, the road will have to be maintained till the completion of the work in the first instance and the annual cost of its maintenance will be Rs. 200/-.

Raibag. 16/7

Superintending Engineer, K.I.C.


D.
62309

133

MTP 1151/62309

J Rx.

P.W.D.

Submitted with refce. to the F.D's note at p. 12 ante

2. The S.E., K.I.C. has intimated vide p. 17 ante that the cost of repairs to the cart track between Ghatapradha and Raibag Railway Station would be Rs. 1,013/- and that the road will have to be maintained till the completion of the work in the first instance at the annual cost of Rs. 200/- on its maintenance. These papers may again be referred u.o. to the F.D. with a request to approve of this Dept's. proposal.

Thro: D.E. (I).

11/8/51

11/8/51

11/8/51

ACCOUNTANCE DEPARTMENT
III
Diary No. 17.8.51.
Date
Serial No. 74296

Issued U.O. to F.D 14-8-51

Finance department

III

Submitted with reference to this deptt. L.12 note dated 25-1-57.

2 The P.W.D has now stated that the cost of repairing the road in question will be Rs 1013/- and the maintenance charges would amount to Rs 200 p.a. The expdr. will be met from Sanchant Grant. This may be brought out in the orders.

3 In the above circumstances, P.W.D proposal may be agreed to.

Pas 21/8/57

22/8

MIP 1151

761.22

A.S (F)

for V/Chief

31-8-57

now totter put d. 29-8-57

30

~~2+14-57/35~~ MIP.1151/76122

P.W.D

T.B.

Submitted with refce. to this Deptt u.o.n. 19 dt. the 14-8-51.

2 The F.D. having agreed the draft 23-24 put up for approval may issue.

Thro' B.R. and D.E. ~~(2)~~

x/ in D.E (1)

Shm 20/9/51 6/9/51 20/9/51.

20/9/

D.S.

No. MIP. 1151 J

Letter 1 1 P.W.D., B.C (B'bay No.1)

13/ 6th Oct. 51.

To

The S.E., K.I.C.

Subject: Laying a temporary road within Rly. limits between Ghataprabha stn. to Raibag stn.

P.9-17

Refce: Your letter No. Gh.L.B dt. the 28-12-50 and 16-7-51, on the above-mentioned subject.

2. Your proposal to repair the cart track between Ghataprabha and Raibag Rly. stations at a cost of Rs 1,013/- ; to incur an annual expenditure of Rs 200/- for the maintenance of this road till the completion of the Ghataprabha L.B. Canal in the first instance and to enter into agreement with the M.&S.M. Rly. is approved

3. The expenditure involved should be met from the sanctioned grant for the Ghataprabha Left Bank Canal under the

the 3/4 head "68 - P.W. Rapp

By order of the G. of B.

Asstt. Secy. to the G. of B. D.A. Nil.
P.W.D.

Copy. forwarded for information
to

The F.D

The A.G. Bombay (thro' the F.D.)

6/1/41

Issue
5/10
6

Issue
6/c

Letter.

No.MIP 1151 J.

Public Works Department,
Bombay Castle (Bombay No.1),
6th October 1951.

To

The Superintending Engineer, Karnatak Irrigation Circle

Subject:- Laying a temporary road within Railway limits between Ghataprabha Station to Raibag Station.

Reference: Your letters No.Gh.L.B., dated the 28th December 1950 and 16th July 1951, on the above mentioned subject.

2. Your proposal to repair the cart track between Ghataprabha and Raibag Railway Stations at a cost of Rs.1,013/- to incur an annual expenditure of Rs.200/- for the maintenance of this road till the completion of the Ghataprabha Left Bank Canal in the first instance and to enter into agreement with the Madras and Southern Mahratta Railway, is approved.

3. The expenditure involved should be met from the sanctioned grant for the Ghataprabha Left Bank Canal under the head "68-Post War Reconstruction and Development Programme".

By order of the Governor of Bombay,

Assistant Secretary to the Government of Bombay
Public Works Department.

D.A:- Nil.

Copy forwarded for information to -

the Finance Department,
the Accountant General, Bombay (through the Finance Department).

Orders issued after ... with Finance ... ment.
Notes remain ... Department and can be ...

/61.

Central Waterpower, Irrigation and Navigation Research Station, Poona

NOTE ON INSPECTION OF THE GHATAPRABHA LEFT BANK CANAL & REGULATORS

In connection with the problem referred to the Research Station by the Superintending Engineer, Karnatak Irrigation Circle, Dharwar, regarding the remodelling of the Weir Regulator and Canal Head Regulator of the Ghataprabha Left Bank Canal to pass a discharge of 2000 cusecs against the present flow of 150 cusecs, model experiments have been proposed to be carried out at the Station.

The suggestion of the Director was also sought for the location of a Standing Wave Flume and his remarks were requested on the design of the Jagnur Aqueduct. In order to get familiar with the site conditions and to see the working of the existing Regulators, an inspection tour was undertaken by Shri D.V.Joglekar, the Director, accompanied with Mr.Luthra, Research Assistant, who arrived Ghataprabha on the morning of 25th August 1951. The Dhupdal Weir and the Regulators were inspected with Shri A.G.Naik, Superintending Engineer and his staff and discussions were held. The important points and suggestions made are given below:-

A. Dhupdal Weir - During the discussion, the Superintending Engineer stated that there was a proposal of raising the Weir sill from R.L.2008.0 to R.L. 2012.0 but that it was not yet finalised. It was decided that the existing sill level at R.L.2008.0 should be taken for the purpose of the model experiments on the Weir Regulator. The Director suggested that it was desirable to collect data of water levels upstream and downstream of the Weir especially for maximum discharge. With proper profiling a coefficient of discharge (C in formula $Q = C.L.H^{3/2}$) as high as 5.0 can be obtained; but in this case the effect of submersion downstream will reduce the value of C.

B. Weir Regulator - The flow conditions downstream of the Regulator were observed when they were discharging 110 cusecs and also when no discharge was passed. The following points were verified:-

1) The height of the entrance of the 3 sluiceways is 6 ft and not 5 ft 9 inches as given in the drawing and the width of 4 ft is correct.

2) The top of the longitudinal section of sluiceway is horizontal while the bed is having a slope of 3" in 14 ft. 11 3/4 inches length.

C. Canal Regulator - A very important point was observed by the Director on inspecting the working of the Canal Regulator and the scouring sluices. The flow conditions upstream of the Regulator were not favourableas the five sluices of the Regulator, which are situated on left bank of the Approach Channel, are at an angle of 90° with the direction of flow, there being no bellmouthing or an approach curve. This naturally would result in a considerable amount of head loss with a discharge of 2000 cusecs. The scouring sluices are, on the other hand, in line with the direction of flow in the Approach Channel. (See photos).

Two out of five sluices of the Canal Regulator were in operation and the flow in them was also not symmetrical. The gate slots were having appreciable effect on flow pattern at entry and causing loss of head. It was pointed out that simple bellmouthing the piers would not increase the discharge coefficient. A favourable approach would have to be imposed by suitably designing curved cut-water of piers and expansion on downstream side of the sluices will have to be provided to create desirable conditions of flow. This indicated the necessity of a three-dimensional model for which additional funds would be required.

The exit conditions downstream of the canal regulators were also unsatisfactory. The outlet channel takes off with a sharp curve. A suitable super-elevation to the channel bed, will have to be determined experimentally to ensure smooth flow. The Director also pointed out the necessity of reducing losses in the approach and exit channel which are in deep rock cutting, by removing rock projections on the sides and bed.

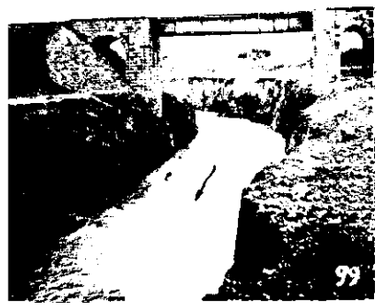
D. Standing Wave Flume - As regards the suggestion of a suitable site for a S.W.F., Site No.II (i.e. between chainage 2000 to 2600) was found to be suitable as the approach and exit conditions are quite straight here. At site No.I which is in deep rock cutting, the effect of upstream curvature of the canal at Railway Bridge may persist down to the flume when it would be discharging 2000 cusecs. No experiments are necessary if the S.W.F. is located at site No.II, which is finally recommended by the Director.

The

On Director's enquiry about the weed trouble in the canal the S.E. replied that there was no weed trouble anywhere. The Relief map in the Executive Engineer's office was inspected and the sites of the two storage dams named Hadalga Dam on the Ghataprabha river and Ayra Dam on the Chitari were discussed along with other development schemes.

E. Jagnur Aqueduct The site and construction work of the Jagnur Aqueduct on the canal was also visited. During discussion the Director remarked that the S-shaped curve at entrance transition upstream of the aqueduct as shown in the drawing was somewhat sharp. The S.E. stated that the curve in the final design would be made slightly flatter.

"GHATAPRABHA LEFT BANK CANAL"



(Looking upstream)
Photo showing the canal curvature at the Railway Bridge and approach to Site No.1 for Standing Wave Flume.

Site No.2
for the location of S.W.Flume.

Site No.3
for the location of S.W.Flume.

PROGRAMME OF EXPERIMENTS FOR CHATAPRABHA LEFT BANK CANAL HEAD REGULATOR

1. Introduction

The Canal Regulatorx is located on the left bank of the Canal. The length of the Approach Channel between the Weir Regulator and the Canal Regulator is 3028 ft. There are 5 sluices, each 4'x6'. Only two sluices are in action and the other three are blocked, as the present discharge is only 150 cusecs.

It is now proposed to put into operation all the 5 sluices including those closed at present in order to pass a maximum discharge of 2000 cusecs which the canal will be called upon to carry in the near future. To carry this discharge, the existing sluices will have to be remodelled by addition of bellmouth entrances and flaring divergences.

During the inspection it was observed by the Director that the approach conditions of flow at the entrance of the sluices were highly unfavourable as the flow lines have to negotiate an acute bend of 90° before entering the sluices. It is, therefore, essential to carry out the experiments on a full width G.S.model of all the 5 sluices incorporating the upstream and downstream portions of the channel with existing cross sections.

2. Model and Scale of the Model

In the present case a G.S. model of the Regulator to 1/10 scale is proposed to be constructed in which the 5 sluiceways under the existing conditions will be reproduced. After determining the existing coefficient of discharge, a suitable bellmouthing, downstream divergence and curved cut-waters of piers will be tested to increase the discharge coefficient. Pressure distribution will also be studied.

3. Programme of Experiments

Tests are proposed to be conducted in the following order:

(1) Experiment with the existing 5 sluices under present flow conditions to investigate discharge coefficient.

(2) Experiment with the addition of an ideal bellmouth.

(3) Experiment with the bellmouth and downstream 1 in 10 divergence added to the outlet of the sluices.

(4) Experiment to determine the optimum design of curved out-waters of piers.

(5) Determining the super-elevation to the bed of the curved outlet channel -- to reduce losses.

In these experiments, the effect of about 1 ft afflux at upstream of the S.W.F. in the water levels downstream of the Canal Regulators will be considered.

---

vki
compd ....

Province

Branch CWIN Research Station, Poona.

Name of work Experiments for remodelling of Ghataprabha L.B. Canal Regulator (Bombay State).

Abstract of cost—Original estimate.

[P. W. M. Code, paragraphs 330—332.]

P. W. D. 8.

Division.

Sub-division.

Item No.	Sub-heads and items of work.	Quantity or No.	Rate. Rs.	As.	P.	Per.	Amount. Rs.	Total. Rs.
1.	Clearing the site.	lump sum					50	
2.	Providing a 2' wide Standing Wave Flume.	"					50	
3.	Construction of a 60 ft long approach channel to the model. Bed of the channel = 3 ft wide and height of walls = 2.0 ft in brick masonry including pointing and plastering.	255 cft	140	-	-	100 cft	357	
		420 sft	30	-	-	" sft	126	
4.	Construction of the model of 5 sluiceways with gates.	lump sum					400	
5.	Providing a downstream curved channel, heading up arrangement and exit channel.	"					150	
6.	Providing angle irons machined for observing levels.	40 rft	3	-	-	rft	120	
7.	Additions and alterations in the model.	lump sum					300	
8.	Copper tubing for piezometric observations.	40 rft	-	12	-	"	30	
9.	Rubber tubing for piezometric observations.	60 "	-	4	-	"	15	
10.	Perspex sheet 1/4" thick size 4' x 3'. 1 No.	12 sft	7	8	-	sft	90	
11.	Glass tubes for pressure stand, plasticine, pinch cocks and other unforeseen articles.	lump sum					100	
12.	Photographic materials.	"					50	
							1838	
	Add 5% contingencies.						92	
	Total C.O.						1930	

Carried over

Item No.	Sub-heads and items of work	Quantity or No.	Rate.	Per.	Amount.	Total.
			Rs. As. P.		Rs.	Rs.
	Brought forward				1930	
	Labour charges for conducting experiments (Workcharged Estt)					
	One trained Mazdoor at Rs. 65/- p.m. for 3 months.	3 months	65 - -	month	195	
	Two Mazdoors at Rs. 45/- p.m. for 3 months. 2 x 3 = 6 months.		45 - -	"	279	
					2395	
	Overhead charges at 25%				599	
				Total	2994	
				Say Rs.	3000/-	
				TOTAL		

D. V. Joglekar

Director, CWIN Research Station, Poona.

Sanctioned for Rupees

Engineer.

Engineer.

NJP—ACP-18/110/48 PJ (M.F.P—8284/OP-919 Civil.)—2.2.49—12000 Pads

P. W. D. 8.

Details of measurements.

[Central P. W. D. Code, paragraph 81.]

Name of work Experiments. for Remodelling of Ghataprabha L. B. Canal Regulator (Bombay State)

Details of work.	No.	Measurements. L.	B.	H.	Quantities.
1. Clearing the site.		Job			Job
2. Providing a 2' wide Standing Wave Flume		Lump sum.			
3. Construction of a 60' long approach channel to the model. Bed of channel 3 ft wide, height of walls 2 ft in brick masonry including Painting and Plastering.					
i) Side Walls	2	60'	3/4'	2'	= 180 sft of brick masonry laid in cement.
ii) Bed	1	60'	3'	5/12'	= 75 sft. " "
				Total	255 sft
iii) Plastering 2 sides.	2	60'	-	2	240 sft) Total
iv) Plastering Bed.	1	60'	3	-	180 ") 420 sft.
4. Construction of the model of 5 sluiceways with gates.		lump sum.			
5. Providing a downstream curved channel, leading up arrangement and exit channel.		"			
6. Providing angle irons machined for observing levels.	2	20'	/	-	40 rft.
7. Additions and alterations in the model.		L. S.			
8. Copper tubing for piezometric observations.		40 rft.			
9. Rubber tubing for piezometric observations.		60 rft.			
Perspex sheet 1/4" thickness.	1	4'	3'		12 sft.
11. Glass tubes for piezometric stand, plastiline pinch cocks and other unforeseen articles.		LS			
12. Photographic materials.					

Carried over

[illegible]

No.44-50/5723 of 1951.

Poona 1, 13th October 51.

From

The Director, Central Waterpower, Irrigation and Navigation Research Station, Poona 1.

To

The Superintending Engineer,
Karnatak Irrigation Circle, DHARWAR.

Sub:- Model experiments for remodelling the Canal Head Regulator of the Ghataprabha Left Bank Canal.

Sir,

1. In continuation of my D.O.No.44-50/587 dt.28/8/51, I send a copy of the Inspection Note for your information.

2. The need of carrying out model experiments with a three-dimensional model of the Canal Head Regulator also has been personally explained. A note on the Programme of experiments along with an estimate for carrying out these experiments is enclosed herewith.

Yours faithfully,

Director, CWINRES, Poona.

Accompts: P.1-5

1. One Inspection Note.
2. Programme of Experiments. P 11-13
3. Estimate. (photos will follow) P 7-9

✓ Copy,w.c., to the Chief Engineer, P.W.D. (Irrigation), Bombay State, Bombay, for information.

Copy, with accompaniments, to Shri S.D.L. Luthra, Res.Asstt. Kdk.

D V Joglekar

Director, CWINRES, Poona.

VKI

20

14/11

MIP/1151

85-241

1 11/10

For disposal pl. see S.No. 90219

29/10/17

P. W. D.
MIP 1151
8885

18/10

18/10/85

24 1958 159

No. 44-50/ 5819 of 1951.

Poona 1, 18 October 51.

From

The Director, Central Water and Power Research Station, Poona 1.

To

The Superintending Engineer, Karnatak Irrigation Circle, Dharwar.

Sub:- Model experiments for remodelling the Canal Head Regulator of the Ghataprabha Left Bank Canal.

Sir,

In continuation of this office No. 44-50/5723 dt. 13th October 51, I send herewith a set of 9 photos, which may please be inserted at the end of the Inspection Note at proper places.

Yours faithfully,

Encl:-

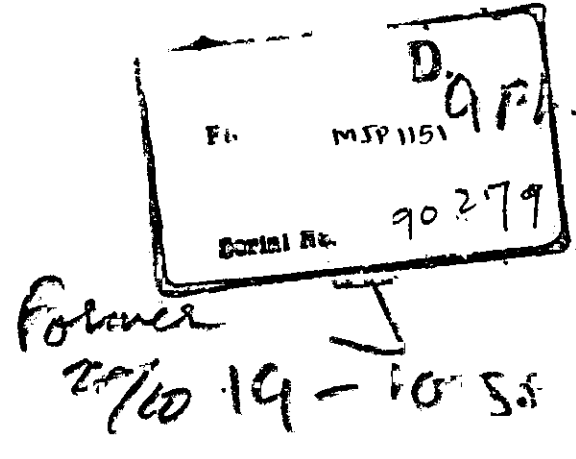
C.R.O.

As above. Dy. Director, CW&PRS, Poona.

Copy, with a set of photos, f.w.c., to the Chief Engineer, PWD (Irrigation, Bombay State, Bombay, for doing the needful.

Copy, with a set of photos, to Shri S.D.L.Luthra, R.A.Kk

Encls- As above. Dy. Director. CW&PRS, Poona.


D.
Fi MSP 1151
Serial No. 90279

~~25~~ 1/ MIP.1151/90279

16/ P.W.D

J.B.

Submitted for information

~~2. Further developments may be awaited~~

Thro' D.E (I)

29/10/57 1-X-57

D.S. (G+E)

C.E.

9-11-57

11/11

25+1.11 163

No.Gh.L.B. Karnatak Irrigation Circle,
Dharwar, 18th Nov.,1951.

To

The Chief Engineer to Government,
Public Works Department,
Bombay.

Subject:- Model experiments for remodelling the Canal Head Regulator of the Ghataprabha Left Bank Canal.

Reference: Letters No.44-50/5723 of 13-10-51 (19) and 44-50/5819 of 18-10-51 (21) from Director, Central Waterpower Irrigation and Navigation Research Station, Poona 1, addressed to this office and copy endorsed to you.

2. In the sanctioned estimate for the Ghataprabha Left Bank Canal under construction, a provision of Rs. 10,800/- has been made for constructing one extra masonry opening for the weir regular to pass a discharge of 1500 cusecs required for the Canal. This provision is in addition to the existing three openings, one of which is at present blocked by masonry.

3. It is, however, considered inadvisable to dismantle the masonry near the weir regular to provide the extra opening if avoidable and instead, remodelling of the same is under consideration. The matter was discussed with the Director, C.W.I.N.R.Station,regarding the type of remodelling of existing three openings that may ~~duly~~ be required to pass a future probable maximum discharge. The Director has been supplied with all the necessary data and the detailed drawings. The Director has also visited the site and has collected necessary information personally.

4. Similarly the remodelling of Canal Regulators has to be considered. The Director has been requested to consider the future probable maximum of 2000 cusecs with an increase of F.S.D. both in the Head Channel and the Canal.

5. The other points discussed with the Director were: (a) the raising of the Dhupdal weir and to modify the profile to suit a high coefficient weir and to provide gates over the same to serve as a balancing reservoir of 1000 M.cft. required for Ghataprabha Left Bank Canal and (b) the location of the S.W.F. immediately below the Canal Regulator for measuring the discharge in the Canal as stated in his letter referred to above.

6. The Director, C.W.I.N.R.Station has now submitted an estimate amounting to Rs.3,000/- for conducting experiments to determine the shape of bellmouthing to be provided for the Canal Regulator as also the modifications required in the weir regulators to pass a probable future discharge of 2000 cusecs. I am accepting the estimate and authorising him to incur expenditure against this estimate and the allotment placed at my disposal and start the experiments early. This may be approved.

Karnag. 1/11

Executive Engineer,K.I.C.,

27

MIP 1151
94884

P. W. D.
J

The S.E., K.I.C., reports that certain experiments are required to be conducted in connection with the Weir Regulator of the Ghataprabha Left Bank Canal for (i) determination of the shape of bell-mouthing to be provided for the Canal Regulator and (ii) other modifications required in the Canal Regulators to pass a probable future discharge of 2000 cusecs. These experiments have been entrusted to the Dir., C.W. & P.R. Station, Poona. The necessary estimate of Rs.3000/- in this connection has been accepted by the S.E. The expenditure will be met from the grants placed at his disposal. The S.E. requests that his action in authorising the Dir. to carry out the experiments may be approved. If approved, the draft put up for approval may issue.

Through D.E.(I) ~~& X Br.~~

VSD
15/11/51

15.11.51

The action taken by the S.E. may be accepted

C. E

2 Letter 167 MIP 1151
94884

No.MIP 1151 J.

Public Works Deptt.,
B.C. (Bombay No.1),
24th November 1951.

To

The S.E., K.I.C.

Subject:- Model experiments for remodelling the Canal Head Regulator of the Ghataprabha Left Bank Canal.

Reference:- Your letter No.Gh.L.B., dated 1-11-51. 625

2. Your action in authorising the Director, C.W.& P.R. Station, Poona, to conduct experiments to determine the shape of bell-mouthing to be provided for the Canal Regulator as also the modifications required in the Weir Regulators to pass a probable future discharge of 2000 cusecs is approved.

ISSUED
VSD 27-11-51 afn
15/11/51

A.S
for Chief Engineer,
Public Works Department.

D.A.-Nil.

15.11.51

Asst. Engr. 20/11

Sr. Kar 24/XI

Letter
No. G-34

Office of the Superintending Engineer
Karnatak Irrigation Circle,
Dharwar, 31-8-1951.

To

The Chief Engineer to the
Government of Bombay,
Public Works Department,
Bombay-1.

Subject:- Ghataprabha Left Bank Canal works.

The allotment granted for the above work during 1951-52 is Rs.27,68,500/- against Rs.80,00,000/- provided in the budget estimate. Requests for additional funds are already made by this office but due to present financial stringency additional allotment exceeding Rs.30,00,000/- can not be anticipated this year. This was discussed in the conference of the Superintending Engineers held in Bombay last.

Moreover the Land Acquisition Officer, Ghataprabha has requested to reserve Rs.16,55,000/- for payment of land compensation this year.

In view of the inadequate funds for the work portion this year, the canal work is being restricted to mile 9 only. Accordingly the canal work in mile 30 let out ~~of~~ to Shri.S.H.Wagh, Contractor, Belgaum on B-2 tender (which was necessary to be done ~~now~~ if the work was to be completed by 1954 as originally programmed) has been stopped unconditionally as agreed to by the Contractor. If additional funds are made available in October 1951 work will be restarted in miles 10 to 18.

D.A: nil.

Superintending Engineer, K.I.C.

BR/31-8.

170

P.N.D.

J 18.

Submitted for information

Theo. B Bz

12-9-51

D.S.

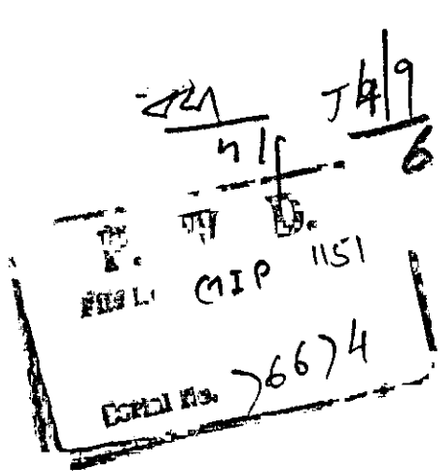
C.E.

H.M

J 277

Nair

I'll keep in view file.



Letter

No.Gh.L.B.

Karnatak Irrigation Circle,
Post Box No.28,
Dharwar, 9th Aug. 1953.

To

The Chief Engineer(Irrigation),
Public Works Department,
Bombay 1.

Subject:- Laying a temporary road within-Railway limits between Ghataprabha Station to Raibag Station.

Reference: Govt. P.W.D.letter No.MIP 1151 J, dated 6-10-1951. P.189

The Executive Engineer, Ghataprabha Left Bank Canal Division No.1, Ghataprabha, has now reported after inspection that the cart track by the side of the Railway line between the stations - Chikodi Road and Raibag, passing through very rugged and difficult terrain has been extensively damaged during the last two years, and the cost of making the road, vehicle-worthy now and maintaining it in tolerable condition would be very high.

2. Under the circumstances, the proposal of laying a temporary road between Ghataprabha and Raibag Railway Stations is dropped and the Railway Authorities have been informed accordingly.

Yours faithfully,

Superintending Engineer,K.I.C.

IP.1151/94493 172 P.W.D.

J. Bx.

Submitted for information P.171 SiD 14/8/53

Tno' B.Bx.

14/8/53

14/8/53

17/8/53 D.S.(C9+E)

FP. 13/8 J 12/8

P W. D.
File No MIP
No. 94493

J 12/